

An Assessment for our Future: An Investigation of the Presence of External
Ecological Assets within Three Counties and One City in Southwest Virginia
6th Grade Youth

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ABSTRACT

Problem: Prevention Planning Teams are challenged with developing intervention programs designed to decrease youth risk behaviors. Literature indicates that by increasing the number of assets/protective factors within a child's external ecology it decreases the likelihood of the youth participating in risk behaviors. Information which explicitly focuses on the etiology (external ecology) of youth risk behaviors for Southwest Virginia Region (SWVAR) 6th grade youth had not been performed; therefore, this study investigated the reported external ecology present in the SWVAR 6th grade youth, whether there are differences in the reported external ecology by gender, and whether there are differences in the reported external ecology by race/ethnicity.

Methods: The SWVAR 2009-2010 6th grade Youth Risk Behavior Surveys were analyzed and items extracted which pertained to the Search Institute Developmental Assets Framework. Twelve survey items were identified which fit into the External Asset Building Block areas of Support, Empowerment, and Boundaries and Expectations. Responses to these items by SWVAR 6th grade youth who participated in the 2009-2010 YRBS (n=2051) were analyzed via descriptive statistics for overall responses and Chi-Square in relation to gender and race/ethnicity.

Results: Descriptive statistics and Chi-Square analysis indicated an overall positive external ecology. There were however statistically significant differences by gender and race/ethnicity in each of the represented External Asset Building Blocks.

Conclusions: SWVAR 6th grade youth who participated in the 2009-2010 YRBS indicated an overall positive external ecology by overall responses, gender and race/ethnicity. There are however segments by gender and race/ethnicity which indicate a need for intervention and/or further investigation.

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“Every American leader, parent, and citizen personally and collectively must commit to reclaim our nation’s soul and give our children back their hope, their sense of security, their belief in America’s fairness, and their ability to dream about envisage, and work toward a future that is attainable and real”

–Marian Wright Edelman, Children’s Defense Fund

Chapter 1

Introduction

“The often cited African proverb, ‘it takes a village to raise a child’ not only suggests that communities must take responsibility for the healthy development of their children, but also that strong communities are necessary to sustain resilient families and children” (Child Welfare League of America, 2002, p. 1). In an effort to create stronger and more resilient communities, prevention planning teams have been implemented to assess communities and create programs which address the needs of the communities which they serve. One such task designated to community planning teams is the reduction of youth risk behaviors. Within the Southwest Virginia Region there are Prevention Planning Teams which are in part dedicated to this task. The members of such planning teams consist of educators, police officers, business people, parents, judges, students, concerned citizens, medical personnel, and other caring individuals. Each member contributes to the representation and facilitation of decreasing youth risk behaviors which result in such special interest areas as substance abuse, teen pregnancy, violence, and other behaviors. To facilitate an understanding of the degree to which these behaviors occur, as well as the patterns and trends within these behaviors, the Youth Risk Behavior Survey (YRBS) was implemented by the Centers for Disease Control

(CDC) for use by planning teams. Unfortunately, much of the data produced regarding behaviors of youth focus on risk behaviors which when reported, paints a daunting and overwhelming picture that seems impossible to address (Edwards, Mumford, Shillingford, & Serra-Roldan, 2007; Scales, Benson, Leffert, & Blyth, 2000; Seligman & Csikszentmihalyi, 2000). Despite the abundance of information gained from the Youth Risk Behavior Survey regarding participation in such behaviors, to date, there has been no study investigating the etiology of this problem in a specific Southwest Virginia Region which consists of one city and three counties. For the purposes of discussion, this Southwest Virginia Region will be referred to as SWVAR with county and city delineation noted as county 1(C1), county 2 (C2), county 3 (C3), and city 4 (C4). Further, 6th grade youth should be the focus of the investigation as during this time youth become increasingly more involved with their peers with decreasing adult supervision (Rice & Dolgin, 2002). Literature indicates that by increasing the number of developmental assets in a youth's life, it decreases the likelihood of youth participating in risk behaviors (Scales, 2000; Search Institute, 2009; Murphey, Lamonda, Carney, & Duncan, 2004); therefore, it is necessary to understand which and to what degree assets are present in the lives of our youth during this crucial time period. Until such assessment of assets is conducted, health education intervention will be insufficient and will foster the creation of more generalized targets and objectives rather than produce specific goals which could build on and increase community assets.

Despite attempts to understand the pathology of youth risk behavior and subsequently provide appropriate interventions to youth in the SWVAR, there have been challenges to gaining the necessary information (P. Prince, personal communication, March 2009). A lack of acknowledgement of the full scope of pathology, legislation banning various content, and

a lack of financial and human resources are just a few of these areas (P. Prince, personal communication, March 2009). Trends have shown that the earlier the onset of youth engagement in risk behaviors, the greater their overall and long term risk (Smith, 1999). Smith further indicates that “age of initiation is directly related to not only subsequent risk behavior, but also to level of risk exposure and long term health impact” (Smith, 1999, p. 1); therefore, it is crucial that we have an understanding of the strengths present in the lives of our youth at a pivotal point in their lives- the 6th grade year. This demonstrates the need for continued research and intervention into the presence of factors proven to create positive outcomes rather than wait for the “symptom” to appear (Edwards et al., 2007; Seita, 2000; Seligman & Csikszentmihalyi, 2000). The concepts of positive psychology and research regarding developmental assets have contributed to our knowledge base and offer support to the focus of etiology.

In 2000, Doctors Martin Seligman and Mihaly Csikszentmihalyi, both prominent psychologists, introduced the concept of positive psychology, which suggested that, to date, there had been too much emphasis on the negative aspects of pathology: “this almost exclusive attention to pathology neglects the fulfilled individual and the thriving community” (p.5). They suggested that more research was needed in the area of “positive features that make life worth living” (Seligman & Csikszentmihalyi, 2000, p. 5). Understanding the etiology of a problem is key to intervention where there is no longer “preoccupation with repairing the worst things in life to also building positive qualities” (Seligman & Csikszentmihalyi, 2000, p.5). This concept of positive psychology also extends into the arena of communication. By turning attentions away from the negative aspects of risk behaviors

which can create a sense of being overwhelmed and focusing on building of known assets, the “problem” becomes less intimidating and has a sense of manageability.

An understanding of the use of positive psychology and youth assets is necessary when investigating and planning intervention programs because community support is essential (Child Welfare League of America, 2002; Mannes, Roehlkepartain, & Benson, 2005; Scales, Benson, Roehlkepartain, Hintz, Sullivan, & Mannes, 2004; Seligman & Csikszentmihalyi, 2000). Community involvement is an essential component to addressing the “etiology” and, therefore, contributing toward the healthy physical and psychosocial development of its youth. As the community is part of the external ecology, it impacts its youth and, as youth are part of the community, youth in turn impact the community (Ormrod, 2008; Rice & Dolgin, 2002; Scales, 2005; Stokols, 1992, as cited in Glanz, Rimer, & Lewis, 2002). Unfortunately, the overwhelming negative data in the media regarding the risk behaviors of youth can cause avoidance of the topic rather than addressing the topic. There is a need to redirect and re-frame community thinking more positively. Parents and community members need specific, direct, positive information regarding how to best intervene in the lives of their children. Presentation of information can make a significant difference on how information is received (Seligman & Csikszentmihalyi, 2000). Without an understanding of assets present in the external environment, generalized and insufficient goals are created which can result in varied interpretations and subsequent interventions which may not benefit anyone. Community planners need to be able to identify goals which specifically build upon current assets found to be insufficient. This approach can provide much more valuable information which utilizes the concepts of positive psychology and provides more specific directional paths for intervention.

One proven positive intervention is promotion of developmental assets or protective factors in the lives of our youth (Fergus & Zimmerman, 2005; Scales et al., 2000).

Developmental assets are defined as “the relationships, opportunities, and personal qualities that young people need to avoid risks and to thrive” (Search Institute, 2009, para. 2). Within the general umbrella of developmental assets are both internal and external assets. The external assets are those which are not personal or unique to the individual but rather external to their physical selves and of which they have no direct control. Protective factors are defined as “conditions in families and communities that, when present, increase the health and well-being of children and families. These attributes serve as buffers, helping parents to find resources, supports, or coping strategies that allow them to parent effectively, even under stress” (Child Welfare Information Gateway, 2009, para. 1). Within the realm of each of these terms is that of the external ecological environment. The external ecological environment is recognized as part of the ecological model which recognizes the significance of relationships between the youth and their physical and socio-cultural surrounding and how those relationships influence health behaviors. It is the external ecological environment which can have significant impact on the youth and thereby influence their internal assets and decision making. Regardless as to the terminology used, these factors support the youth in the presence of risk and “act preventively without altering the risk factors themselves” (Sharaf, Thompson, & Walsh, 2009). For the purpose of discussion, the terms *positive external ecology*, *protective factors*, and *developmental assets* will be used interchangeably. These terms embrace the importance of positive external influences in the presence of risk factors acknowledged in each definition and reflect upon the environment as a whole rather than attempting to isolate specific factors or assets.

Two well recognized institutions which have been and continue to be active in investigation of youth behaviors are the Centers for Disease Control (CDC) and the Search Institute. Each institution has developed its own survey tool which has contributed significantly towards gaining knowledge regarding the prevalence of risk behaviors, trends, and factors contributing toward participation in risk behaviors. The tool developed by the Search Institute is known as the “Search Institute Profiles of Student Life: Attitudes and Behaviors Survey.” This survey contains items which investigate the prevalence of developmental assets as well as the prevalence of risk behaviors and investigates the relationship between these two areas (Search Institute, 2009). The research conducted by the Search Institute indicates an inverse correlation between the variables. Specifically, with the increased presence of assets, there is a decreased participation in risk behaviors (Search Institute, 2009). As a result of years of investigation, the Search Institute has developed a compilation of 40 developmental assets which have been found necessary for the healthy development of youth. These developmental assets are divided into categorical age groups and consist of both 20 internal and 20 external assets. For the purposes of this study, the “40 Developmental Assets for Adolescents (ages 12-18)” is used as the framework for the study design (see Appendix A).

In 2005, “youth enrolled in [SWVAR] public schools grades six, eight, ten and twelve completed the Search Institute Profiles of Student Life: Attitudes and Behaviors Survey” (Roanoke Prevention Planning Team, 2005). Outcomes of this Search Institute report indicated a need to continue tracking developmental asset data and to develop goals toward “asset building strategies for adolescents in our community” (Roanoke Prevention Planning Team, 2005, p. 16). In 2007, “legislation was passed that forbid asking sixth grade students

about sexual behavior” (Roanoke Prevention Planning Team, 2007, p. 17) and, therefore, sixth grade students did not participate (P. Prince, personal communication, March 2009; Roanoke Prevention Planning Team, 2007). Unfortunately, by not participating in this survey, information was not only lost regarding risk behavior, but also assets present. This information is very valuable for indicating needs of intervention that, prior to use of the survey, were not previously identified. Further, it was also found that of the surveys allowed to be conducted in 2005 and 2007, 17 out of the 20 external asset areas surveyed were found to have decreased (Roanoke Prevention Planning Team, 2007). Although this data was found to be valuable, the use of this tool required both increased funding and time from participants, neither of which was able to be achieved in subsequent years (P. Prince, personal communication, March 2009).

In 1990, the Centers for Disease Control (CDC) introduced a tool currently known as the Youth Risk Behavior Survey (YRBS). The YRBS is a survey tool that was designed and established to be used among the nation’s youth to for the purposes of monitoring health risk behaviors, changes in these behaviors, and co-occurrences of these behaviors to provide comparison and to monitor progress toward achieving objectives (Brener et al., 2004). Assessment and analysis of this data contributes toward funding received from the CDC through cooperative agreements (Brener et al., 2004). Since the early 2000’s, planning teams throughout the SWVAR have been utilizing the Youth Risk Behavior Survey (YRBS) to survey SWVAR youth risk behaviors. Although the core content of the CDC’s version of the YRBS intentionally does not contain survey items related to protective factors (National Center for Chronic Disease Prevention and Health Promotion, 2010), users of the survey may modify or add content to suit planning efforts. The current versions of the YRBS survey used

to study youth risk behaviors in the SWVAR contain relevant survey items regarding the external ecology of our youth. The YRBS used by County 1 contained 20 survey items relating to the youths external ecology (Appendix B), County 2 contained 17 survey items relating to the youths external ecology (Appendix C), County 3 contained 20 survey items relating to the youths external ecology (Appendix D), and City 4 contained 17 survey items relating to the youths external ecology (Appendix E). Although the content and number of many of the questions vary between the surveys, these four surveys all contain 12 identical imbedded survey items which pertain to the presence of external ecological assets. These survey items fit effectively into many of the sections of the developmental assets framework. Although the questions do not reflect each section of the developmental assets framework, analysis of these items can provide relevant information regarding the presence of external ecological assets that impact in terms of nurturing internal assets. These assets, when combined, are ultimately necessary for our youth as they embark on increasing periods of time without adult supervision. Although baseline data has been collected regarding the prevalence of youth risk behaviors and the items independently, despite overwhelming evidence which supports the need for protective factors/assets, to date, no study has comprehensively reviewed the overall external ecology information available through the YRBS. Therefore, no baseline of external ecology has been established in the SWVAR. Further, racial/ethnic and gender differences have also not been investigated.

The aforementioned 12 questions effectively fit into many sections of the developmental assets framework and provide an appropriate beginning framework for analysis of the assets present in our youth. Although by virtue that studying assets must also include an understanding of deficits, this information should be investigated separately in an

attempt to more clearly route interventions. By using the concepts of positive psychology and the framework of developmental assets in conjunction with imbedded developmental asset related questions of the SWVAR YRBS, a much more insightful and significant portrait of the full pathology of youth risk behavior can be gleaned and can contribute toward meeting the established goals of the planning teams within the SWVAR.

Importance of the 6th Grade Year/ Pre-adolescent Years

Research in youth risk behaviors indicates that participation in youth risk behaviors frequently begins in childhood and early adolescence and has, over the years, been found to be occurring earlier and earlier in life (Edwards, et al., 2007). For this reason, research in younger children is a necessity. To date, however, research indicates that such information has been collected only as early as the 6th grade youth. For this reason, the investigation is limited to the data collected at the 6th grade level.

Several theories elaborate on the internal and external contributions toward a child's development, perceptions, and actions during the adolescent years. Sigmund Freud provides a psychoanalytical perspective which theorizes that during this time, the youth is beginning to interact and form relationships with others (Rice & Dolgin, 2002). Jean Piaget provides a cognitive development theoretical perspective which theorizes that the youth moves from concrete thinking to more logical thinking (Rice & Dolgin, 2002). Lastly, in Bronfenbrenner's Ecological Model of Child Development, perspective is provided regarding the importance of consideration of the environment of the child (Ormrod, 2008; Rice & Dolgin, 2002).

Given that children ages zero/birth through approximately 13 years of age are not in control of their ecological environment, but rather are controlled by the adults which surround them (parents and teachers), it is reasonable to infer that environment can and will

influence the child's perception. It is during these formative and primary years (birth through approximately age 13) that youths tend to spend most of their awake time either engaging with adults or at least under adult supervision. During the middle school years approximately (13 to 14 years of age), youths tend to move away from the direct supervision of adults and form more unsupervised, significant, and influential relationships with peers their own age (National Middle School Association, 2003; Rice & Dolgin, 2002). Although developmental assets can be introduced and provide benefit at any point in a child's life, the time period where such external assets can impact internal assets and be most beneficial occurs in the formative and primary years. Studies indicate youths' perception of positive external supports begins to decline during middle school years and continues to do so into high school, yet conversely, if approached more aggressively with increased community extensions, these less positive perceptions seemed to decline (Scales, 2005). Significant interaction with adults in the school and community environments is an important component as external ecological factors can significantly impact or influence the development of internal factors or perspectives thus having an influence on decisions made regarding participation in high risk behaviors (Child Welfare League of America, 2002; Mannes, Roehlkepartain, & Benson, 2007; National Middle School Association, 2003; Scales, 2005; Scales et al., 2004).

Importance of Community Involvement

The phrase "it takes a village to raise a child" rings loud in literature whether written literally or conceptually. Literature discussing developmental assets as well as protective factors has much emphasis on relationships both inside as well as outside of the home. With emphasizing these relationships and understanding the supporting theory, one can begin to

appreciate the necessity of active, involved, positive extensions of the family. These extensions are within the community. Communities as a whole, including individuals and the objects within the communities, can send powerful messages which support or negate the youth's sense of worth and value. Rice and Dolgin (2002) indicate communities in which a youth grows up affects their development. The communities' "structure and function ...either help them fulfill their needs or create new problems...we need to understand [the community] and some of the ways it influences them" (Rice & Dolgin, 2002, p. 4).

Statement of the Problem

SWVAR community planners are challenged with developing goals and intervention plans to address decreasing youth risk behaviors and mobilize communities. To date, the information utilized provides only a portion of the information necessary and it does so in a negative manner. Despite significant evidence which supports that by increasing the number of developmental assets/protective factors present in the lives of youth one can significantly decrease youth participation in risk behaviors, assessment of the cumulative presence of these factors has not been performed. The current version of the YRBS contains relevant questions which can provide this information and thus allow for more comprehensive development of intervention plans. Until such information is provided, planners will be unable to use positive information to gain community support which is necessary to effectively execute such an undertaking.

Purpose of the Study

The purpose of this study was to investigate: (a) the reported external ecology present in the SWVAR 6th grade youth, (b) whether there are differences in the reported external

ecology by gender, and (c) whether there are differences in the reported external ecology by race/ethnicity.

Research Questions

The intent of this study was to answer the following questions:

1. What is the current reported external ecological status of the SWVAR 6th grade youth?
2. Is there a difference in the reported external ecology of SWVAR 6th grade youth by gender?
3. Are there differences in the reported external ecology of SWVAR 6th grade youth by race/ethnicity?

Definition of Terms

1. *Ecological Environment*: objects and persons outside of the individual (Cotrell, Girvan, & McKenzie, 2006; Glanz, Rimer, & Lewis, 2002).
2. *Developmental Asset*: “the relationships, opportunities, and personal qualities that young people need to avoid risks and to thrive” (Search Institute, 2009, para 2).
3. *Protective factor*: “conditions in families and communities that, when present, increase the health and well-being of children and families. These attributes serve as buffers, helping parents to find resources, supports, or coping strategies that allow them to parent effectively, even under stress” (Child Welfare Information Gateway, 2009, Para 1).
4. *Pathology*: “the study of the essential nature of diseases and especially of the structural and functional changes produced by them” (“Pathology,” 2010).
5. *Pre-adolescent/early adolescent*: youths 11- 14 years old (Rice & Dolgin, 2002).

6. *Positive psychology*: a concept introduced by Doctors Seligman and Csikszentmihalyi, which suggest that research and intervention emphasize less of the negative aspects of behaviors and more on positive contributions (Seligman & Csikszentmihalyi, 2000).
7. *Risk behavior*: those behaviors which “contribute markedly to the leading causes of death, disability, and social problems among youth and adults in the United States” (Brener et al., 2004, p. 1). The six priority areas have been identified as (a) behaviors that contribute to unintentional injuries and violence, (b) tobacco use, (c) alcohol and drug use, (d) sexual behaviors that contribute to unintentional pregnancy and sexually transmitted disease, (e) unhealthy dietary behaviors, and (f) physical activity (Brener et al., 2004).
8. *Southwest Virginia Region*: the region of which this study explores and for purposes of this study includes 3 counties and 1 city whose students participated in the most recent YRBS. County 1 estimated 2009 population 32,551 (U.S. Census Bureau, 2010a). County 2 estimated 2009 population 4, 969 (U.S. Census Bureau, 2010b). County 3 estimated 2009 population 91, 011 (U.S. Census Bureau, 2010c). City estimated 2006 population 91,552 (U.S. Census Bureau, 2010d). Each of the county areas is classified by the government as a metropolitan Statistical Area (MSA).
9. *Metropolitan area*: “The general concept of a metropolitan area is that of a large population nucleus, together with adjacent communities having a high degree of social and economic integration with that core. Metropolitan areas comprise one or more entire counties, except in New England, where cities and towns are the basic geographic units” (U.S. Census Bureau, 2010e, para 1).

Limitations

The study was limited by the following factors:

1. This study focused on only a specific southwest Virginia region.
2. There was no manipulation of independent variables.
3. As this study utilized survey data, survey item variables were categorized and analyzed appropriately; however, the overall results relied on perceptions and beliefs of the student answering the item.
4. Generalizations of the study were limited to those counties and cities classified as part of the SWVAR.
5. Survey items used in the YRBS version do not completely reflect all content areas as outlined by the Search Institute Developmental Asset Framework.
6. There is variation of the presentation/ordering of survey items between the four surveys. It is, therefore, necessary to acknowledge that there may be some impact on responses.

Significance of the Study

This body of research was intended to provide a more complete picture of the pathology of youth risk behavior of the SWVAR 6th grade youth. Specifically, information will increase knowledge of external assets present, increase understanding of the importance of external ecological assets to the health and well-being of our children, utilize an established tool in a new fashion, and offer a framework for intervention planning. Literature supports a continued need to assess and understand the influence of the external environment on its members (Child Welfare League of America, 2002) and recognizes the overlap between developmental assets and protective factors and the cumulative influence on

prevention of risk behaviors (Schwartz, Pantin, Coatsworth, & Szapocznik, 2007). Such knowledge of factors can help to design more effective programs specific to communities and are therefore more effective in helping children to thrive (Child Welfare League of America, 2000). This knowledge is intended to generate an increased understanding of the etiology of such behaviors and facilitate conversations for change. The content of such conversations can then emphasize an intervention of positive community building strategies which instill passion and commitment towards creating opportunities and supports that will promote the health and well-being of our youth. Additional implications would also include creating a new use for an existing tool and to contribute toward the development of additional survey items to capture external asset areas currently not addressed.

Assumptions

The following assumptions guided this study:

1. The participants of the study responded truthfully to the survey items.
2. The participants had appropriate comprehension skills to interpret the written items.
3. The participants memory was accurate (not distorted) when answering the survey items.
4. Survey items identified as a variables are, in fact, reflective of Search Institute Framework areas.

Chapter 2

Review of Literature

There is no shortage of research which presents information pertaining to statistics regarding behavior using a medically based disease focus model to investigate “pathology” (Scales et al., 2000; Seligman & Csikszentmihalyi, 2000). Concurrently, there is an abundance of literature which indicates that the presence of protective factors in the lives of youth is an effective strategy for reducing participation in youth risk behaviors (Edwards et al., 2007; Fergus & Zimmerman, 2005; Scales, 2000; Scales et al., 2000). In addition, there is also agreement in the literature that community involvement is essential (Child Welfare League of America, 2002; Fergus & Zimmerman, 2005; Scales et al., 2004; National Middle School Association, 2003). Unfortunately, the focus of much attention remains on negativity surrounding the symptom and prevalence of behavior (Fergus & Zimmerman, 2005), rather than building on/of assets and community motivation. This is thought to be the result of patterned thinking which regards life as that which needs to be “endured” under conditions of adversity rather than building on positive qualities and “flourishing.” With primary emphasis on symptom and behavior, an incomplete picture of the pathology exists, and does not address the crucial aspects which acknowledge etiology and prevention. There is a need to change societal thought patterns to become more positive and proactive in their approach.

As health educators, knowledge of etiology and prevention are crucial to consider in the development, implementation, and outcomes assessment areas of programming (Fergus & Zimmerman, 2005). Knowing the presence of variables associated with decreasing youth participation in risk behaviors is essential when developing intervention programs. A health educator developing intervention programs designed to reduce youth risk behavior must

consider the presence of assets/protective factors within the external ecological environment (Fergus & Zimmerman, 2005). Further, to offer more specificity towards goals development in appropriately addressing the external ecological environment, on a community level, differences in gender and race/ethnicity must be considered.

This chapter presents literature relevant to

1. the conceptual framework with attention to
 - a. Social Cognitive theory,
 - b. the Ecological Model of Health Behavior,
 - c. Ecological Model of Child Development,
 - d. the concept of Positive Psychology, and
 - e. the Developmental Assets Framework
2. the importance of a Positive External Ecology
3. the Youth Risk Behavior Survey,
4. the importance of Assessment in Pre-Adolescents/Early Adolescence –
Developmental and life stage theories,
5. race, ethnicity and gender in risk behaviors, and
6. the necessity of community action/mobilization.

Conceptual Framework

The concepts and theories which support this body of research are Social Cognitive Theory, the concept of Ecological Model of Health Behavior, the Ecological Model of Child Development, the concept of Positive Psychology and finally with regard to methodological framing, the Developmental Assets framework.

Social Cognitive Theory

Background, Constructs, and Organization. Social cognitive theory is categorized as an “interpersonal theory” (Cottrell, Girvan, & McKenzie, 2006). Interpersonal theories are those theories which “include factors related to individuals’ experience and perceptions of their environments in combination with their personal characteristics (Glanz & Rimer, 1995, p. 22)” (as cited in Cottrell, Girvan, & McKenzie, 2006, p. 119).

Social Cognitive Theory (SCT) is the overarching theory which supports investigation of external influences upon youth. This theory, introduced by Bandura “addresses both the psychosocial dynamics influencing health behavior and methods for promoting behavior change” (Glanz et al., 2002, p. 165). Within this theory, behavior can be explained in terms of the dynamic interactions between the individual’s personal characteristics, behavior, and environmental factors, hence the name components *social* which addresses the environmental influence and *cognitive* which addresses personal attributes inherent in the individual. Encompassed in this theory are 10 major constructs (Cottrell, Girvan, & McKenzie, 2006; Glanz, Rimer, & Lewis, 2002; McKenzie, Neiger, & Smeltzer, 2005). These constructs are (a) reciprocal determinism, (b) environments and situations, (c) observational learning, (d) behavioral capability, (e) reinforcement, (f) outcome expectations, (g) outcome expectancies, (h) self-efficacy, (i) self control of performance, and (j) managing emotional arousal (Glanz, Rimer, & Lewis, 2002). These constructs involve both personal factors and external influences. Personal factors are those inherent to the individual including cognition, regulation of emotion and behavior, and ability to reflect and analyze experiences. These personal factors, however, are also capable of being influenced by external interactions. This study focuses on the external environment, and as

this aspect is the only realm in which the health educator can directly affect, the constructs specific to the external environment are elaborated. These specific constructs are reciprocal determinism, environments and situation, observational learning, behavioral capability, reinforcement, and outcome expectations.

Reciprocal determinism refers to the “continuing interaction among the characteristics of the person, the behavior of that person, and the environment within which the behavior is performed” (Glanz et al., 2002, p. 168). Within this construct, acknowledgement is made that change to one component has implications of change to another component.

Environments refer to “objective factors that can affect a person’s behavior but that are physically external to that person” (Glanz et al., 2002, p. 168). Situation refers to the cognitive or mental representation of the environment (including real, distorted, or imagined factors) that may affect a person’s behavior...it is a perception of the environment, such as place, time, physical features activity, participants, and his or her own role in the situation (Glanz et al., 2002, p. 168).

Glanz et al. (2002) indicate that it is the environment and situation that “provide an ecological framework for understanding” (p. 168) and that the environment has become increasingly recognized as a crucial component to address when attempting to change behavior.

Observational learning, which is also understood as vicarious reward or vicarious experience, refers to learning which takes place through observation. Specifically, learning occurs through watching “the actions of another person and the reinforcements that the person receives...the learner discovers rules that account for behavior of others by observing

the behavior and the reinforcements they receive for their behavior” (Glanz et al., 2002, p. 170). If the observed individual receives what is perceived as reinforcement or reward for behavior, the observer is more inclined to engage in that same behavior, whether positive (i.e., eating healthy foods) or negative (i.e., smoking), in the future.

Behavioral capability refers to the performance of a learned behavior. It involves the observer having “knowledge of the behavior” and “how to perform” the behavior (skill) (Glanz et al., 2002). This concept “distinguishes between learning and performance because a task can be learned and not performed...performance presumes learning” (Glanz et al., 2002, p. 171).

Reinforcement within SCT incorporates three types: direct, vicarious, and self reinforcement. These categories are further divided into “external (extrinsic) and internal (or intrinsic) reinforcement” (Glanz et al., 2002, p. 171). External or extrinsic reinforcement is “the occurrence of an event or act that is known to have a predictable reinforcement value [whereas] internal reinforcement is a person’s own experience or perception that an event had some value” (Glanz et al., 2002, p. 172).

Finally, outcome expectations refer to the anticipated events which the observer learns as the likely response to a particular behavior in a given situation (Glanz et al., 2002).

Glanz et al. (2002) indicate that there are four ways expectations are learned:

- (1) from previous experience in similar situations (performance attainment), (2) from observing others in similar situations (vicarious learning), (3) from hearing about these situations from other people or social persuasion, and (4) from emotional or physical responses to behaviors (physiological arousal). (p. 172)

Application to Research. The constructs of reciprocal determinism, environments and situations, observational learning, behavioral capability, reinforcement, and outcome expectations presented in Social Cognitive Theory provide sound and considerable theoretical justification to investigate the reported external environment of the SWVAR youth as a means to understanding the etiology of risk behaviors and thus better equip the health educator to build on existing assets and develop goals. The use of these theoretical constructs guides not only the investigation, but can guide discussions, recommendations, and subsequent interventions.

Ecological Model of Health Behavior

Background, Constructs, and Organization. The term *ecology* is rooted in the biological sciences and refers to the relationship between organisms and their environments (Glanz et al., 2002). The term has evolved into the behavioral sciences and public health sciences and is known as the *ecological perspective*. This perspective “focuses on the nature of people’s transactions with their physical and socio-cultural surroundings (Stokols, 1992, p. 7)” (as cited in Glanz et al., 2002, p. 462). “The purpose of an ecological model is to focus attention on the environmental causes of behavior and to identify environmental interventions (McLeroy, Bibeau, Steckler, & Glanz, 1988, p. 366)” (as cited in Glanz et al., 2002, p. 463). Within the ecological perspective, environment becomes an important term and indicates objects and persons outside of the individual (Cotrell, Girvan, & McKenzie, 2006; Glanz et al., 2002). The identification of these concepts is important to the health educator as it is included in the ecological perspective and includes five levels of influence. The ecological perspective

recognizes that health behaviors are part of a larger social system (or ecology) of behaviors and social influences, much like a river, forest or desert is a part of a larger biological system (or ecosystem), and that lasting changes in health behaviors require supportive changes in the whole system, just as the addition of a power plant, the flooding of a reservoir, or growth of a city in a desert produce changes in the whole ecosystem (O'Donnell, 1996, p. 244)" (as cited in Cotrell et al., 2006, p. 111).

The ecological perspective includes the concept of "level of influence" and includes 5 levels: "(1) intrapersonal, or individual factors, (2) interpersonal factors, (3) institutional, or organizational, factors, (4) community factors, and (5) public factors" (Glanz et al., 2002, p. 111). Ecological models of health behavior are an acceptable method in which to guide research methods and in turn provide for a method to evaluate and develop health related interventions. Ecological factors are recognized in ecological models/perspectives of health behavior. Within the ecological perspective, there is a focus "on the nature of people's transactions with their physical and socio-cultural surroundings (Stokols, 1992, p.7)" (as cited in Glanz et al, 2002, p. 462). "The purpose [therefore] of an ecological model is to focus attention on the environmental causes of behavior and to identify environmental intervention (McLeroy, Bibeau, Steckler, & Glanz , 1998, p. 366)" (as cited in Glanz et al., 2002, p. 463). The model considers the connections between people and their environment and how these variables interact to and are influenced intrapersonally (Glanz et al., 2002, p. 463).

Application to Research. Within the realm of health educators, ecological models of health behavior are acceptable methods in which to guide research and in turn provide for a method to evaluate and develop health related interventions. The fundamental principles

justify the need to assess the multitude of assets present within the environment that have potential to influence youth's perceptions and subsequent behaviors.

Ecological Model of Child Development- Bronfenbrenner's Ecological Systems Theory

Background and Organization. One model in which to view child development is that of the Ecological Model of Child Development which was proposed by Urie Bronfenbrenner. Bronfenbrenner's perspective includes social influences that are categorized into a series of systems which extend outside of the youth (Rice & Dolgin, 2002). This series of systems, as they extend beyond the physical child, become the child's ecological environment. It includes the microsystem, the mesosystem, the exosystem, and the macrosystem. Bronfenbrenner's model proposes that a child's development is influenced through interactions the child has with the objects and people within these systems. According to Rice and Dolgin (2002), these systems are defined and understood to impact the youth as follows:

1. The microsystem includes the environment in which the youth has the most immediate contact. For the children and adolescents, this system is usually comprised of the immediate family, school, friends, and various social and/or religious groups to which the youth may belong and may change over time. "A healthy microsystem offers positive learning and development that prepares the adolescent for success in adult life (Muuss, 1988)" (as cited in Rice & Dolgin, 2002, p. 40).
2. The mesosystem includes the relationships that exist among the microsystem settings. Examples of these relationships would be how school influences home and in turn how home influences school or religious affiliation/group might

- influence family and in turn family influences religious affiliation/group. The interactions between the micro and meso systems can have a relationship which provides reinforcement for each other, or causes conflict and can ultimately cause stress in the life of the youth if the values diverge and cannot find resolution (Rice and Dolgin, 2002).
3. The exosystem is a system which, although the youth does not have an active role, effects the youth nevertheless. An example of such influence is that of parents' work (such as rate of pay, allotted vacation time/schedules, and decisions within the work place) and its impact on the parent, and how this ultimately impacts the relationships with the youth. Another example is that of policy changes in school systems and or town government which in turn impact the youth (Rice and Dolgin, 2002).
 4. The macrosystem is a system composed of more abstract concepts such as ideologies, attitudes, mores, customs, and laws within a given society or culture. This system establishes standards of behavior and may vary from culture to culture. An example would be that of opinions regarding corporal punishment or prayer (Rice and Dolgin, 2002).

Application to Research. This model demonstrates that the ecological environment influences the development of the child through a multitude of dynamic interactions at many levels- both direct and indirect. These interactions subsequently influence the youths' internal processing skills which in turn influence decision making skills. It presents the justification that it is, therefore, necessary to understand the influences present in the lives of youth. It

supports the need to investigate the external environment and allows for appreciation of how these interactions may and can change over time and within different contexts.

Positive Psychology

Background, Constructs, and Organization. Positive psychology is a concept that was introduced by Doctors Martin Seligman and Mihaly Csikszentmihalyi. The concept outlines a “science of positive subjective experience, positive individual traits, and positive institutions [which] promises to improve quality of life and prevent the pathologies that arise when life is barren and meaningless” (Seligman & Csikszentmihaly, 2000, p. 5). The concept acknowledges the efforts of psychologists to address the symptoms of mental illness but recognizes that mental illness alone is not the full scope of psychology. The concept recognizes that although one may not suffer from mental illness, the absence of illness does not necessarily equal “happiness” (Seligman, Parks, & Steen, 2004). Seligman et al. (2004) indicate that little was known about what makes a person “optimistic, kind, giving, content, engaged, purposive or brilliant” (p. 1379). Dr. Seligman stated that psychology needed to “be just as concerned with what is right with people as what is wrong” (Seligman et al., 2004, p. 1379). Through a review of the literature, there were “three constituents of happiness: (i) pleasure (or positive emotion); (ii) engagement; and (iii) meaning” (p. 1380). The first route to greater happiness is recognized as being hedonistic and recognizes increasing positive emotion. Within this route were three recognized areas, one of which is increasing positive emotion about the future by building hope and optimism. A suggested intervention to achieve such positive emotion through building hope and optimism is by building “optimism and [challenging] discouraging beliefs of the past” (Seligman et al., 2004, p. 1380). The second

constituent, engagement, “involves the pursuit of gratification” (p. 1380). This concept of gratification suggests that the key is for individuals to be fully engaged. Suggested activities which individuals may find gratifying include but were not limited to teaching a child and accomplishing a difficult task. In the final constituent, meaning, the authors suggest meaning comes from using our “strengths to belong to and in the service of something larger than ourselves” (p. 1380). It is through belonging or service that satisfies a longing for a purpose in life and provides meaning.

Application to Research. These routes and concepts presented in positive psychology provide the foundation to acknowledge that in an effort to mobilize a community for action, assets of the community must be identified and positive feedback regarding abilities to achieve change must be provided. The use of positive psychology in assessment and interpretation has the ability to create a passion for its members to gain happiness for themselves and create optimism for the future of their community and its overall success.

Developmental Assets Framework

History of Development and Organization. The Developmental Assets Framework is a framework developed by the Search Institute. The Search Institute is an independent non-profit organization whose mission is dedicated “to provide leadership, knowledge, and resources to promote healthy children, youth, and communities” (Benson, 2010, para. 1) In its 50 year history, the Search Institute has provided significant research regarding influences which impact our nation’s youth positively including the importance of developmental assets in the health and well development of a child.

Developmental assets are those assets that have been found to be necessary aspects of a child’s life which decrease risk behavior participation thereby maximizing the positive

outcomes of youth. “Studies of more than 2.2 million young people in the United States consistently show that the more assets young people have, the less likely they are to engage in a wide range of high-risk behaviors and the more likely they are to thrive” (Search Institute, 2009, para. 4). The 40 developmental assets framework consists of 20 external and 20 internal factors which influence behavior and which have been found necessary for creating resilient, thriving, healthy and well youth (Fergus & Zimmerman, 2005; Scales et al., 2000; Scales & Taccogna, 2001; Search Institute, 2009). The broad category of external assets is divided into four building blocks which are further divided into the 20 external asset areas. These building blocks and asset areas are identified as follows:

Support: (1) Family support, (2) Positive family communication, (3) Other adult relationships, (4) Caring neighborhood, (5) Caring involvement in schooling, and (6) Parent involvement in schooling.

Empowerment: (7) Community values youth, (8) Youth as resources, (9) Service to others, and (10) Safety.

Boundaries and Expectations: (11) Family and Boundaries, (12) School boundaries, (13) Neighborhood boundaries, (14) Adult role models, (15) Positive peer influence, and (16) High expectations.

Constructive Use of Time: (17) Creative activities, (18) Youth programs, (19) Religious Community, and (20) Time at home.

(Appendix A: 40 Developmental Assets for Adolescents [ages 12-18]).

Application to Research. The Developmental Assets Framework provides the framework on which the methodological arrangement of questions will be based. Elaboration

of the developmental assets is discussed further in the literature review and the framework is discussed further in the methods sections.

Positive External Ecology (Developmental Assets and Protective Factors)

The importance of a positive external ecological environment during development is well documented in the literature which addresses developmental assets and protective factors. The Search Institute has produced much literature supporting the importance of such Developmental Assets. Using their self developed tool, the Search Institute Profiles of Student Life: Attitudes and Behaviors Survey, developmental assets have been found to have a positive impact on a youth's ability to succeed in school, have successful relationships, develop necessary skills for resiliency, decrease participation in risk behaviors (Edwards et al., 2007; Fergus & Zimmerman, 2005; Scales, 2000, 2005; Scales et al., 2000; Scales & Taccogna, 2001). These assets referenced are both internal and external and although internal assets can have pre-determined influences beyond influence (nature), there is opportunity to influence the internal assets through the external environment by building on the external assets (Scales Benson, et al, 2000; Edwards, et al., 2007; Fergus & Zimmerman, 2005; Scales, 2000; Scales & Taccogna, 2001).

The Search Institute has studied the presence of assets and their relationship to participation in youth risk behaviors in more than 2.2 million young people in grades 6 through 12 in the United States. The result of their research indicates that the more assets a young person has, the less likely he/she is to participate in youth risk behaviors and that these assets are important regardless of gender, economic status, family status, or race/ethnicity (Search Institute, 2009). This research has culminated in the ability to predict risk behavior patterns by level or presence of developmental assets. The 40 developmental assets are able

to be grouped into categorical assets of 0-10, 11-20, 21-30, and 31-40. In these categories, research has found that there is an inverse relationship between level of asset and risk behavior pattern. For example, with regard to problem alcohol use (used alcohol three or more times in past month or got drunk once in past two weeks), 6th to 12th grade youth who report 0-10 assets reported the behavior 45%, those with 11-20 assets reported 26%, those with 21-30 assets reported 11%, and those with 31-40 assets reported 3% (Search Institute, 2009, para. 5).

In addition to decreasing participation in risk behaviors, developmental assets have been shown to predict thriving indicators, a concept that although there has been no singular uniform consensus as to the definition, includes “the absence of problem behaviors or other signs of pathology...and signs or indicators of healthy development” (Scales et al., 2000, p. 28). These thriving indicators when present during youth have been found to relate to positive outcomes in adulthood (Scales et al., 2000). “The seven thriving indicators are (a) school success, (b) leadership, (c) helping others, (d) maintenance, (e) delay of gratification, (f) valuing diversity, and (g) overcoming adversity” (Scales et al., 2000, p. 28). Should these behaviors be fostered through developmental assets, it is clear that investment in youth today can reap immense return on benefits in the future.

Independent studies outside of the Search Institute have also had similar findings related to developmental assets. In a study conducted by Fulkerson et al. (2006), there was a significant relationship between the frequency of family meals as an external asset/ protective factor and decreasing participation in youth risk behaviors. Specifically, there were consistent inverse relationships between the frequency of family dinners and all high risk behaviors and that increased strategies to support family meals should be pursued. In another

study investigating the protective effects of developmental assets on adolescent tobacco use, Atkins, Oman, Vesely, Aspy, and McLeroy (2002) found that developmental assets may serve to protect youths from engaging in tobacco use. Specifically, it was found that out of ten assessed developmental assets areas, youths who reported to have nine of the assets were less likely to report tobacco use than those who reported lower asset frequency. Murphey et al. (2004) reported that in utilizing a brief measure of youth assets with only six asset related questions, there were again inverse correlations between the presence of assets and decreased participation in all risk behaviors surveyed.

Protective factors have been found to influence the reduction of youth risk behaviors. According to Goldberg (2006), growing up in a chaotic household, poor family relations, and lack of nurturing can increase the potential for youth to use drugs. In contrast, factors that can reduce participation in drug use are such protective factors as parental involvement, parents who are active in their children's lives, who monitor children, and provide clear rules for their children (Goldberg, 2006). In a study conducted by Sharaf, Thompson, and Walsh (2009), the external factor of family support was found to have a moderate impact on self esteem which had correlations with suicide risk. Specifically, "increased social support is associated with better physical and mental outcomes...[and that] feelings of connectedness to the family are likely to reduce feelings of social isolation and loneliness, antecedents to suicide behaviors" (p. 165). Turner, Irwin, Tschuann, and Millstein (1993) found that "perceptions of [the youth's] family relationships were associated with the initiation of sexual intercourse, substance abuse and fighting" (p. 203). In this study, again, the protective factor of family relationship was found to have an inverse relationship to the risk behavior. Specifically, young adolescents who had parents who encouraged autonomy and expression

of opinion were less likely to engage in sexual behavior. Lastly, a review of literature also found that when investigating youths detained in a juvenile justice center, the youths reported lacking risk behavior prevention factors (Chew, Osseck, Raygor, Elridge-Houser, & Cox, 2010).

Youth Risk Behavior Survey (YRBS)

History and Purpose. In 1990, the Centers for Disease Control (CDC) established the Youth Risk Behavior Surveillance System (YRBSS) in response to a need to monitor health risk behaviors among youth and to establish priority risk behaviors (Brener et al., 2004). As part of this surveillance, a survey titled the “Youth Risk Behavior Survey” (YRBS) was developed. The YRBS is conducted every two years during the spring of the academic year. It is intentionally conducted during this time to gain a picture or snapshot of risk behavior that is not necessarily influenced by such festivities as football games, holidays or proms (P. Prince, personal communication, March 2009). The YRBSS has five purposes:

1. To determine the prevalence of health risk behaviors among youth,
2. To assess for changes in risk behaviors,
3. To examine co-occurrence of risk behaviors
4. To provide comparable data on the national, state, and local levels, and
5. To monitor progress toward achieving national health objectives. (Brener, et al., 2004)

When developing the initial questionnaire, the CDC first reviewed the leading causes of morbidity and mortality in the nations’ youth and adults (Brener et al., 2004). Since this time, the survey has undergone multiple reviews and revisions which reflect site and national priorities such as the national health objectives. Its core content, however, primarily utilizes

survey questions which focus on examining youth engagement in six priority high risk behaviors which “contribute markedly to the leading causes of death, disability, and social problems among youth and adults in the United States” (Brener et al., 2004). This information is traditionally used to identify areas in need of intervention and provides support for need of intervention programs and funding (Brener et al., 2004). The six priority areas have been identified as: (a) behaviors that contribute to unintentional injuries and violence, (b) tobacco use, (c) alcohol and drug use, (d) sexual behaviors that contribute to unintentional pregnancy and sexually transmitted disease, (e) unhealthy dietary behaviors, and (f) physical activity (Brener et al., 2004; Centers for Disease Control, 2009).

Southwest Virginia Region (SWVAR) Use of the YRBS. Community planners in the SWVAR, specifically three counties and one city, have participated in the collection of YRBS data for approximately 10 years. As previously noted, community planners have the ability to incorporate additional questions. In 2008, there were 12 questions added to the existing YRBS survey which were present in each of the counties’ existing YRBS surveys. These 12 survey items related to developmental assets/ecological environment. These questions primarily focus on the external assets of *support, empowerment, boundaries and expectations, and constructive use of time* as outlined in the Developmental Assets Framework.

According to the Search Institute (2006), as cited in Edwards et al. (2007), these terms are defined as follows:

1. Support- refers to the “emotional support from family members, friends, and school professionals” (Edwards et al., 2007p. 148). The six areas which indicate support are (a) family support, (b) positive family communication, (c) other adult

- relationships, (d) caring neighborhood, (e) caring school climate, and (f) parent involvement in schooling (Search Institute, 2006).
2. Empowerment- refers to the belief that students are “valued members of the community and that they can contribute to others” ((Edwards et al., 2007p. 148). The four areas which indicate empowerment are (a) community values youth, (b) youth as resources, (c) service to others and (d) safety (Search Institute, 2006).
 3. Boundaries and expectations- refers to “students need [for] clear, standards for conduct, consistent consequences, and encouragement” ((Edwards et al., 2007p. 148). The six areas which indicate boundaries and expectations are (a) family boundaries, (b) school boundaries, (c) neighborhood boundaries, (d) adult role models, (e) positive peer influence, and (f) high expectations (Search Institute, 2006).
 4. Constructive use of Time- refers to “students need [for] opportunities to enjoy themselves and learn new skills through creative activities” ((Edwards et al., 2007p. 148). The four areas which indicate constructive use of time are (a) creative activities, (b) youth programs, (c) religious community, and (d) time at home (Search Institute, 2006).

By extracting the related questions and analyzing the responses using the Developmental Assets framework (Appendix A), insights into the effects of the external ecology can be gained.

In a study conducted by Murphey et al., (2004), 30,916 students in Vermont schools grades 8- 12 were investigated to assess the relationship between six asset related questions included in the YRBS and the ability to predict risk behaviors and health promoting

behaviors. This “brief measure” study provides support for this study as strong correlations between variables were found. In addition, recommendations for broader use of assets measures were encouraged in settings that serve young people.

The Need to Understand. As noted in the Introduction, much valuable information has been gained from the YRBS surveys. The information gained from the SWVAR YRBS indicates a need to continue to address reduction of youth participation in risk behaviors. In the most recent analyses of the SWVAR YRBS, performed by Redican and Sallee (2007, 2008), the following recommendations for 6th grade and middle school were made:

- “Continue with the activities and efforts designed to reduce youth risk behaviors” (Redican & Sallee, July, 2007, p. 27; Redican & Sallee, June 2007, p. 23).
- “Continue to monitor youth risk behaviors” (Redican & Sallee, July, 2007, p. 27; Redican & Sallee, June 2007, p. 23).
- “Provide activities and programs to support those students who engage in low risk behaviors” (Redican & Sallee, July, 2007, p. 27; Redican & Sallee, June 2007, p. 23).
- “Provide activities and programs to assist those students who engage in high risk behaviors” (Redican & Sallee, July, 2007, p. 27; Redican & Sallee, June 2007, p. 23).
- “Implement comprehensive health education K-12” (Redican & Sallee, July, 2007, p. 27; Redican & Sallee, June 2007, p. 23).
- “Work closely with community health agencies in monitoring and programmatic activities” (Redican & Sallee, July, 2007, p. 27; Redican & Sallee, June 2007, p. 23).

- “Place special emphasis on 6th grade educational interventions in order to help decrease the risk behaviors of middle school students”(Redican & Sallee, July, 2007, p. 27; Redican & Sallee, June 2007, p. 23-24).
- “Health education and information should be apart of a County wide comprehensive and coordinated effort” (Redican & Sallee, June, 2008, p 19).
- “Monitoring of student’s health related behaviors should continue and should serve as a springboard for changes in the curriculum or services provided when appropriate” (Redican & Sallee, June, 2008, p 19).
- “Health education and information should be a part of a County wide comprehensive and coordinated effort” (Redican & Sallee, December, 2008, p. 20).
- “Monitoring of student’s heath related behaviors should continue and should serve as a springboard for changes in the curriculum or services provided when appropriate” (Redican & Sallee, December, 2008, p. 20).

These excerpts indicate a clear need for continued research and strong directed efforts to investigate and identify new and innovative ways to assess, communicate, and intervene on a community wide basis. Analysis of the identified 12 questions can contribute toward meeting these recommendations.

Importance of Assessment in Early Adolescence

Developmental and Life Stages Theories. The need to analyze the information reported by the pre-adolescent, 6th grade population is supported by several theories of development and life stages. As noted in the conceptual framework, Brofenbrenner’s Ecological Model of Child Development demonstrates the need to consider the impact of

youth's external ecology on development of perception and subsequent decision making skills.

Sigmund Freud approached development from a psychoanalytical viewpoint. During the later childhood and pre-adolescent years, according to Freud, the child would be leaving the "genital stage" and entering the "latency stage." It is during the latency stage that the child begins to engage more in school and other activities, continues to foster relationships with other people who help to satisfy their needs for love and, therefore, shifts attention to other people rather than themselves, and cultivates friendships (Rice & Dolgin, 2002). This shift is important to recognize as it is during this time that a child begins to explore friendships and relationships through outside activities and interests. These interests are enveloped in the external environment and therefore both the relationships formed and the context in which they are formed can influence the child and are therefore vital to our understanding of youth risk behavior.

In Piaget's stages of Cognitive Development Theory, he identifies cognitive stages of development and recognizes that at the approximate age of 11- 12 years children begin to develop the ability to think about concepts and think more logically rather than concretely (Ormrod, 2008). In more recent perspectives of Piaget's theory, researchers have found the effects of experience can "help youngsters acquire reasoning abilities sooner than Piaget thought was possible" (Brainerd, 2003; Kuhn, 2006 as cited in Ormrod, 2008, p. 37). In considering Piaget's theory as well as later developments, it becomes important to recognize that youths can be influenced, whether positively or negatively, at earlier stages of life than perhaps previously acknowledged. In addition, this application of Piaget's theory lends

increased credibility to Bronfenbrenner's Ecological Model of Child Development which emphasizes the many layers of environmental influences have upon a child's development.

In each of the theories, it is recognized that the youth bring forth internal variables, which can be influenced by external variables. Given the importance of the formative and primary years toward youth health and wellness, the need for concise specific information, the impact suggested by the concept of positive psychology, and research regarding developmental assets, there is a need to assess the external ecological supports which are present during such a pivotal period of life: the 6th grade year. The information derived from such an assessment can be used as a valuable tool that can be used for planning interventions as well as teaching the community about their necessary and powerful role in the life of children.

Supporting Literature. Scales (2005) reported that young people between the ages of 10 and 15 are transitioning from the role of child to teenager. During this time, there are changes in physical, cognitive, moral, psychological, and socio-emotional areas which can result in varied degrees of angst as they alternate back and forth between these roles. In addition to this personal transition, there is also often a transition of environment whereby they have completed the elementary educational institutions as the eldest children, and have entered the middle school institution as the youngest. This transition creates both excitement as well as anxiety and as Scales' (2005) research indicates, creates many concerns associated with rules, expectations, and the possibility of being bullied by older students.

Literature indicates that although the early adolescent to adolescent time period can be a difficult one, the more developmental assets present, the more positive the outcomes can

be with regard to general and academic success (Hillaker, Brophy-Herb, Villarruel, & Hass, 2008; Lerner, Almerigi, Theokas, & Lerner, 2005; Scales et al., 2006).

Application to Research. Understanding the ecological environment of the early adolescent (6th grade time period) is important as theory and literature indicate that this is a crucial time period during which a tremendous amount of social and psychological development occurs. This information supports the need to focus the attentions of this current study on early adolescence (6th grade youth).

Race, Ethnicity, and Gender

Any discussion of differences in race/ethnicity and gender can bring about an array of emotions. These emotions can stifle or ignite the call to action. Regardless as to the emotion, literature supports more investigation and increased intervention (Charlotte-Mecklenburg School System and Mecklenburg County Health Department Epidemiology Program, 2008). It is at this juncture, however, that children are often placed in high risk categories. This label identifies the child as being more likely to participate in certain behaviors yet reports indicate that although certain youths can be identified as more likely to participate, they alone should not be targeted in isolation (Edwards et al., 2007; Murphey et al., 2004; Sieta, 2000). It is, therefore, not the intent to identify negativity within classifications or to label, but to identify assets of the youths ecological environment which can be built upon to address needs and thereby support interventions to decrease differences. This effort in turn increases overall positive interactions between youth in general and their communities.

Supporting Literature. Distinct differences in patterns of risk taking behavior have been found with regard to gender, race and ethnicity (Browne et al., 2001; Carvajal, Hanson, Romero, & Coyle, 2002; Clubb, Harlow & Roberts, 2010; Connor, Poyrazli, Ferrer-Wreder,

& Grahame, 2004; Newman-Sztainer et al., 1996; Turner et al., 1993; Weden & Zabin, 2005). Studies indicate that violence among minority middle school students is quite common (Browne et al., 2001; Clubb, Harlow, & Roberts, 2010) and that males are more likely to report violence related behaviors. Carvajal et al. (2002) found distinct differences between Latinos and Non-Latino Whites in the areas of violence- specifically in carrying a weapon, low academic orientation, and physical activity. In the same study, boys were more likely than girls to use various substances, participate in violent behaviors, and less likely to report depressive symptomology. In a study which investigated socio-demographic variations of health compromising behaviors among youth, it was found that although extreme weight loss practices were not found significant at the sixth grade level, older youth of Hispanic and American Indian descent were more likely to engage in unhealthy weight loss practices (Neumark-Sztainer et al., 1996). In the same study, Hispanics and American Indians were also found to have higher rates of suicide attempts, cigarette smoking, and with regard to marijuana use, African American, American Indian, and Hispanic youth reported more frequent marijuana use (Neumark-Sztainer et al., 1996). Gender differences were also noted. Because of these findings, it is important to understand how the external environments may differ between genders (Browne et al., 2001; Clubb et al., 2010).

Application to Research. Dent and Cameron (2003) indicated that external assets in the form of social relationships can play a significant role for children considered high risk and experiencing challenging circumstances. Such relationships foster resilience which is “the construct that helps children who are considered at risk respond adaptively to adversity, cope with and manage major problems and negative life events and succeed despite what are seemingly intractable disadvantages in life”(as cited in Edwards et al., 2007, p. 147). This

finding is additionally supported as literature indicates that the increased number of protective factors and developmental assets was significantly associated with decreased participation in risk behaviors and increased health promoting behavior and are “independent of the effects of grade level, gender, race/ethnicity...” (Murphy et al., 2004, p. 190); however, differences in race/ethnicity and gender with regard to number of assets present have been found (Frank & Kendall, 2001; Harlow & Roberts, 2010; Murphey et al., 2004; Siqueira & Diaz, 2004). Given these findings, it is important to investigate what youths are saying about their external ecology. This ecology could mean the difference in thriving and self destruction.

Community Action/Mobilization

According to the Child Welfare League of America (2002), “By recognizing and nurturing the assets and strengths of children, youth, families, and communities, we tap into sources of energy and creativity that have the greatest potential for meeting children’s needs and encouraging their optimal growth” (p. 5). This statement indicates a clear need for understanding the assets of youth and the influences of their external ecology. This information, however, must be disseminated to the community in such a manner that it is received and well understood and leads to igniting a community into action.

Supporting Literature. Community partnerships that promote a positive external ecology are heavily emphasized throughout much of the literature discussing reduction of youth risk behaviors (Child Welfare League of America, 2002; Mannes, Roehlkepartain, & Benson, 2005; Redican & Sallee, 2007, June 2008, December 2008; Scales et al., 2004; Sieta, 2000). The promotion of such an ecology can present itself in numerous ways, such as frequent meals with family, community adults modeling positive behavior for youth,

community adults engaging in communication with youth, related and non-related adults reinforcement of positive youth behaviors, community adults indicating a value of the youth, and others (Chew et al., 2010; National Middle School Association, 2003; Scales et al., 2004; Siqueira & Diaz, 2004). In addition, Scales et al. (2004), suggested that unrelated adults may play important roles in the “positive socialization” (p. 213) of youth. Despite the information in the aforementioned study, it was also found that the majority of adults do not engage positively with youth. Therefore,

increased dialogue, informal and formal, about what adults expect of each other when it comes to sharing responsibility for nurturing children and youth, may also enable those already more involved with young people to serve as more explicit norm shapers and models than they do currently. (Scales et al., 2004, p. 227)

Moreover, there is general agreement among American adults as to a core set of values and expected behaviors that should be passed on to youth; however, there is an inconsistency between these thoughts and actual actions of adults (Scales et al., 2004). In an effort to encourage the development of increased positive interactions between youth and adults, information must be delivered in a method that promotes mobilization rather than immobilization. To accomplish this information should be delivered in a fashion that emphasizes assets and positive features of both community and youths (Fergus & Zimmerman, 2005; Seligman & Csikszentmihalyi, 2000) and to provide “explicit greater permission for adults to become more deeply engaged in the lives of children outside of their families” (Scales et al., 2004, p. 213).

Communities are crucial to the development of resilient youth. The information gained from this research will only be effective if the community becomes engaged. In order

to engage the community, they must understand “how well it is meeting the universal needs of children [and] this message must be clear, succinct, and memorable” (Child Welfare League of America, 2002, p. 20).

Summary of Literature Review

Theory, current literature regarding external ecology, developmental assets, protective factors, life/developmental stages, differences in race/ethnicity and gender, community mobilization, current individual SWVAR city and county reports, and concepts of positive psychology provide evidence and support for the need to investigate the current status of the external environment of SWVAR youth. The theoretical framework provides sound support for investigating social and cognitive factors influencing health behavior, external ecological factors, the multi-systems influencing children and youth, the need for a positive interpretation of information to enhance communication, and a framework to conduct the study. The literature indicates that although enlightening information has been gained through the YRBS, recommended interventions could be further enhanced through investigation of the ecological environment. This investigation would explore etiology as a method of planning interventions to reduce symptoms or behavior. In addition, race/ethnicity and gender must be considered when designing interventions as without considerations of potential differences, both assets and deficits can be overlooked. Finally, in an effort to address etiology, community must become involved and information provided in a positive manner in order to promote the idea of possibilities and directions for the future.

Chapter 3

Methodology

As indicated by the literature, there is a need to understand the perceived external ecology of youth in an effort to more effectively develop intervention tools which may potentially curtail engagement of said youth in youth risk behaviors. Utilizing data from the most recent 6th grade Youth Risk Behavior Survey (YRBS) for the Southwestern Virginia Region (SWVAR) for County 1, (C1), County 2 (C2), County 3 (C3), and City 4 (C4), 12 questions were analyzed using the Search Institutes' Developmental Assets Framework for Adolescents ages 12-18 as a design framework. The study utilized a quantitative, non-experimental exploratory analysis using descriptive and non-parametric statistics which analyzed the aforementioned 12 questions and select participant demographics.

Sample

The sample for this study was the 6th grade students who participated in the 2009-2010 YRBS from the SWVAR. As noted, literature indicates that it is important to identify the presence of assets as early in the life span as able. To date, the earliest data collected is that of 6th grade youth; therefore, data derived from the 6th grade youth was utilized in this study. The sample was anticipated to be approximately 1800-2500 students (n = 1,800 - 2,500) which was the number of students that participated in the SWVAR YRBS survey in 2007-2008 survey years. The actual number which comprised the sample for this study was 2,051 6th grade youths. The range of respondents for the individual survey items was 1626-1953 (79.28 % - 95.22%) of the total participant data.

Eligibility for participation in survey required that student be present on the day the survey was administered and that parents granted permission for the student to participate. As

this survey is administered on only one day per survey year, only students who were present on the day of administration and whose parents granted permission for participation participated. As literature indicates that both age and social climate/classroom influence behavior, this author finds it reasonable that neither can be isolated and, therefore, unable to justify exclusion criteria; therefore, there will be no age based exclusion clauses. All surveys submitted which indicate that participant as a 6th grade student will be included in analysis.

The Instruments

The instrument used to obtain the primary data was the YRBS which was administered to the SWVAR during the 2009-2010 academic year. The YRBS was developed by the CDC in 1990 and has historically demonstrated both good validity and reliability (Brener et al., 2004). Brener et al. (2004) indicated that the survey has been subjected to multiple laboratory and field data quality testing considering periodic changes to questions, revised wording of questions, non-response attributed to blank response, and standardization of procedures. As with any survey instrument, there are recognized limitations. Brener et al. (2004) reported seven limitations of the YRBS. Three of these limitations are applicable to this study. First, data are self reported and the “extent of underreporting or over reporting of behaviors cannot be determined” (p. 16). Second, data cannot be generalized across populations. Third, only “behaviors that contribute to the leading causes of morbidity and mortality among youth and adults” (p. 16) are assessed. Given these noted limitations, the assumption can be made that the same limitations will applied during this study. This researcher was not be able to determine the degree or extent to which underreporting or over reporting of perception of external assets exists, the data will

not be able to be generalized across populations, and only those areas which were surveyed may be measured.

The tool that was used to determine the survey item appropriateness of fit was the Search Institute's Developmental Assets Framework for Adolescents ages 12-18. As noted in the literature review, the Search Institute has extensive history in the assessment of developmental assets of youth. The Framework's categorical definitions provided the basis for determining appropriateness of fit.

Survey Item Placement. The four questionnaires were compared to determine common survey items present in each of the four surveys. From these surveys, 12 survey items were reviewed and determined to fit into the sub-categories, which are referred to as "Building Blocks", of the Developmental Assets Framework. They were classified and categorized using the Developmental Asset Framework as follows:

Building Block 1: Support. *Support* refers to the "emotional support from family members, friends, and school professionals" (Search Institute, 2006)" (as cited in Edwards et al., 2007, p. 148). Under Support, there are questions pertaining to a caring school environment. *Caring School Climate* refers to "school provides a caring, encouraging environment" (Search Institute, 2006, p. 1).

Survey Questions:

(1) There are lots of chances for students in my school to get involved in sports, clubs, and other school activities outside of class.

Scale: A. Strongly Agree B. Agree C. Not Sure D. Disagree

E. Strongly Disagree

(2) The school lets me and/or my parents know when I have done something well.

Scale: A. Strongly Agree B. Agree C. Not Sure D. Disagree
E. Strongly Disagree

Building Block 2: Empowerment. *Empowerment* refers to the belief that students are “valued members of the community and that they can contribute to others” (Search Institute, 2006)” (as cited in Edwards et al., 2007, p. 148). Under this subcategory are questions pertaining to service to others and safety. *Service to Others* refers to “young person serves in the community one hour or more per week” (Search Institute, 2006, p. 1).

Survey Question:

(3) Do you volunteer in your community (help others without getting paid) such as helping out at a hospital, day care center, food pantry, youth program, animal shelter, community service agency, or faith based program?

Scale: A. No, I do not volunteer B. Yes, up to 1 our per week
C. Yes, 2 hours per week D. Yes, 3-5 hours per week
E. Yes, 6-10 hours per week F. Yes, 11 hours or more per week

Safety refers to “young person feels safe at home, school, and in the neighborhood” (Search Institute, 2006, p. 1).

Survey Question:

(4) Have you ever missed school because you were afraid of being bullied?

Scale: A. Yes B. No

Building Block 3: Boundaries and Expectations. *Boundaries and Expectations* refers to “students need [for] clear, standards for conduct, consistent consequences, and

encouragement” (Search Institute, 2006, as cited in Edwards et al., 2007, p.148). This category contains several questions relating to family boundaries. *Family Boundaries* refers to “family has clear rules and consequences and monitors the young persons’ whereabouts (Search Institute, 2006, p. 1).

Survey Questions:

(5) How wrong do your parents feel it would be for you to smoke cigarettes?

Scale: A. Very Wrong B. Wrong C. A little bit wrong
D. Not at all wrong

(6) How wrong do your parents feel it would be for you to drink beer, wine, or liquor (for example, vodka, whiskey, or gin) regularly (or at least twice a month)?

Scale: A. Very Wrong B. Wrong C. A little bit wrong
D. Not at all wrong

(7) My family has clear rules about alcohol use.

Scale: A. Strongly agree B. Agree C. Disagree D. Strongly disagree

(8) How wrong do your parents feel it would be for you to smoke marijuana?

Scale: A. Very Wrong B. Wrong C. A little bit wrong
D. Not at all wrong

(9) My family has clear rules about drug use.

Scale: A. Strongly agree B. Agree C. Disagree D. Strongly disagree

(10) When I am not at home, one of my parents knows where I am and who I am with.

Scale: A. Yes B. No

(11) Would your parents know if you did not come home on time?

Scale: A. Yes B. No

(12) How wrong do your parents feel it would be for you to break the law (steal, property damage, vandalism, picking a fight)?

Scale: A. Very Wrong B. Wrong C. A little bit wrong
D. Not at all wrong

Building Block 4: Constructive Use of Time. *Constructive Use of Time* refers to students need [for] opportunities to enjoy themselves and learn new skills through creative activities (Search Institute, 2006, as cited in Edwards et al., 2007, p. 148). In this area, the survey item of “Do you volunteer in your community (help others without getting paid) such as helping out at a hospital, day care center, food pantry, youth program, animal shelter, community service agency, or faith based program?” would be appropriate, in this section as it refers to use of time for religious purposes, youth programs, and creative activities;

however, it is accounted for under the heading of “service to others” in the “empowerment” sub-heading noted above.

Research Design

The study utilized a quantitative, non-experimental exploratory analysis using descriptive and non-parametric Chi-Square statistics) statistics which analyzed the aforementioned 12 questions and select participant demographics to answer three research questions. Data was analyzed using Statistical Package for the Social Sciences (SPSS) software. The research questions (RQ) and method of analysis were as follows:

RQ 1: What is the current reported external ecological status of the SWVAR 6th grade youth? This question was analyzed and data derived in the form of descriptive data for each of the 12 identified survey items which are presented in Likert type or categorical formats. The data attempted to communicate the perceived characteristics of the external ecological environment as reported by the SWVAR 6th grade youth.

RQ 2: Are there differences in the reported external ecology of SWVAR 6th grade youth by gender? This question was answered by analysis of each of the 12 survey items against gender. Survey items were analyzed and data derived using a Chi-Square set at the .05 level (2 sided) to determine the significance the number of responses among each of the identified survey items. The Chi-Square was an appropriate statistical measure as this test measures frequency and allows for analysis between expected and chance occurrence of responses as well as the significance of the results when comparing levels of variables. It also allowed for examination of the question of relationship between independent variables that report frequencies of responses (McMillan, 2008). The data attempted to determine whether there are significant differences between the two variables levels understood as gender as

well as if there was a relationship to speak of. The independent variable (IV) was identified as gender and the dependent variable (DV) was identified as the response to the survey item.

RQ 3: Are there differences in the reported external ecology of SWVAR 6th grade youth by race/ethnicity? This question was answered by analysis of each of the 12 survey items against race/ethnicity. For the purposes of this analysis race/ethnic classifications were identified by seven categories (American-Indian or Alaskan Native, Asian, Black or African-American, Hispanic or Latino, Native Hawaiian or Other Pacific Islander, and White).

As in analysis of research question 2, survey items were analyzed and data derived using a Chi-Square set at the .05 level (2 sided) to determine the significance the number of responses among each of the identified survey items. The Chi-Square was an appropriate statistical measure as this test measure frequency and allows for analysis between expected and chance occurrence of responses as well as the significance of the results when comparing levels of variables. It also allowed for examination of the question of relationship between independent variables that report frequencies of responses (McMillan, 2008). The data attempted to determine whether there are significant differences between the four variable levels understood as race/ethnicity as well as if there was a relationship to speak of. The independent variable (IV) was identified as race/ethnicity and the dependent variable (DV) was identified as the response to the survey item.

Data Retrieval

Internal Review Board (IRB) permission to pursue the proposed investigation was granted on September 15, 2010 (IRB# 10-533; Appendix F). Data was retrieved in electronic/compact disc (CD) format from a representative of the SWVAR analysis team.

Chapter 4

Results

The purpose of this study was to investigate (a) the reported external ecology present in the SWVAR 6th grade youth, (b) whether there are differences in the reported external ecology by gender, and (c) whether there are differences in the reported external ecology by race/ethnicity. The study investigated the perceptions of SWVAR 6th grade youths regarding their external ecology.

To answer the research questions, the data from the four SWVAR surveys were combined and the data from 12 survey items retrieved and analyzed in relation to the sub-categories/building block areas of the Developmental Assets Framework.

Participant Data

The participant data used was that of the previously gathered 6th grade student body who participated in the 2009-2010 YRBS from the SWVAR. There were a total of 2,051 6th grade youths who participated in the survey. All surveys submitted which indicated that participant as a 6th grade student were included in analysis; however, results, as is typical of survey data, have varying total numbers of participants depending upon whether the participant chose to answer the selected survey item. The range of respondents for the survey items was 1626-1953 (79.28 % - 95.22%) of the total participant data.

Participant Demographics

Table 1 indicates the participant characteristics of the total 6th grade survey participants (n = 2,051). The majority of respondents were 12 years old or younger; however, ages were reported in all available categorical areas. Gender proportions were nearly equal with females representing a slightly larger majority (50.8%). Although the sample is ethnically diverse with representation in all race/ethnicity categories, the majority of respondents reported White (70%).

Table 1

Participant Characteristics (Total 6th Grade Survey Participants= 2051)

Demographic Area (Total Respondents)	Category	Frequency	Percent of Total
Age (2034)	10 years old or younger	9	4.0
	11 years old	834	41.0
	12 years old	1033	50.8
	13 years old	144	7.1
	14 years old	11	0.5
	15 years old	2	0.1
	16 years old	1	0.0
Gender (2045)	Female	1038	50.8
	Male	1007	49.2
Race/Ethnicity (1895)	American Indian or Alaska Native	83	4.4
	Asian	46	2.4
	Black or African-American	354	18.7
	Hispanic or Latino	57	3.0
	Native Hawaiian or Other Pacific Islander	27	1.4
	White	1328	70.1

Findings

The results of the analysis used to answer the research questions will be explained through presentation of research question, statistical measures applied for analysis of survey items, presentation of areas found to be significant, areas of concern, and the overall implication and answer to the research question. Finally, research question findings are then presented with areas of statistical significance as well as areas of concern across the three research questions as applied within the context of the Developmental Assets Framework. Items of concern are those survey items which indicated a 10% or greater negative response rate were identified as areas in need of improvement and are elaborated upon in the findings.

RQ1: What is the current reported external ecological status of the SWVAR 6th grade youth?

Frequencies were computed using the total 6th grade youth respondents (n = 2,051) for the 12 survey items selected for analysis which were classified according to the Developmental Assets Framework.

Overall, in all 12 survey items analyzed, the majority of the SWVAR 6th grade youth reported favorably or positively about the presence of external ecological assets. However, there were 4 survey items where at least 10% or more of the total SWVAR 6th grade youth reported negatively. In addition, there are 2 items that are worthy of mentioning as an area of concern due to significance of content and the numerical percentage being on the “cusp” of 10%. These items are identified in Table 2.

Developmental Asset Building Block Area: Support

Caring School Climate. There was an overall positive response to the survey items pertaining to Caring School Climate (“There are lots of chances for students in my school to get involved in sports, clubs, and other school activities outside of class” and “The school lets me and/or my parents know when I have done something well”). As shown in Figure 1, the majority (90.6%, n = 1,630) of SWVAR 6th grade youth either strongly agreed or agreed that there were lots of chances for students to get involved in sports, clubs and other activities outside of class. In addition, Figure 2 shows that 83% (n = 1,493) either strongly agreed or agreed that their school let the child and/ or their parents know when the child had had done well. However, given that 7% (n = 134) either strongly disagreed or disagreed and 9% (n = 169) were not sure - totaling 16% (n = 303) - there is an opportunity for improvement. Overall, SWVAR 6th grade youth are in agreement that there is communication about their achievements between school representatives and parents however; there is an ability to either make aware of the communication efforts or increase the communication efforts made to some.

Developmental Asset Building Block Area: Empowerment

Service to Others. The responses from SWVAR 6th grade youth in the area of empowerment, although indicative of a fair number of positive responses, causes concern and demonstrates a need for improvement. The survey item pertaining to the asset of “service to others” (“Do you volunteer in your community (help others without getting paid) such as helping out at a hospital, day care center, food pantry, youth program, animal shelter, community service agency, or faith based program?”), as shown in Figure 3, indicated that the greater majority of SWVAR 6th grade youth, 54.2% (n = 967) do no volunteer work at all,

36.5% (n = 561) volunteer up to one hour per week, and 9.4% (n = 167) volunteer between 2 to 11+ hours per week.

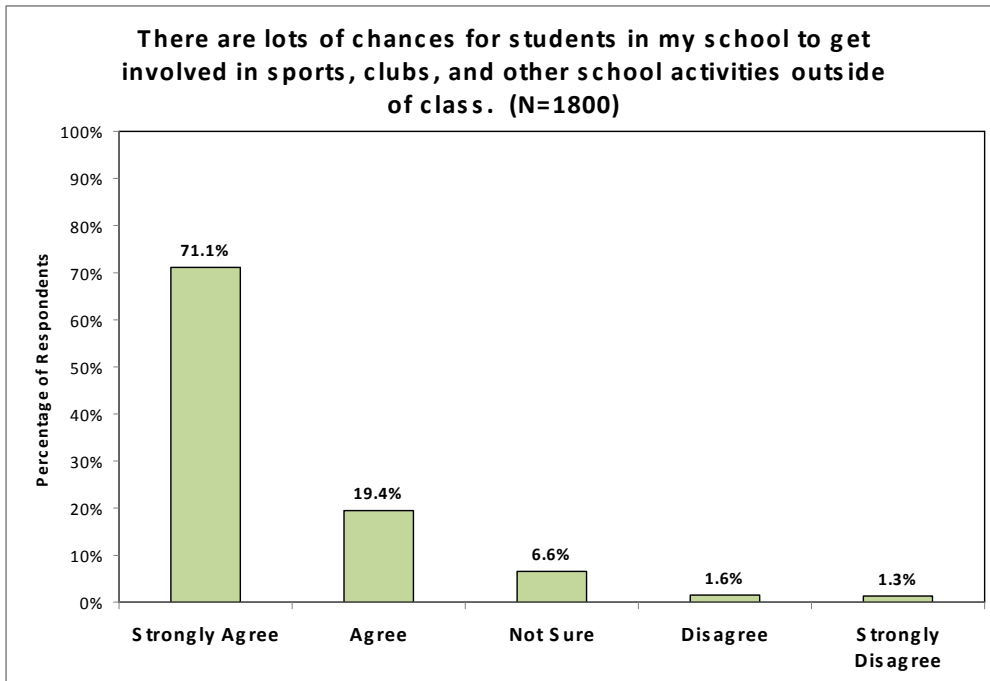


Figure 1. Involvement in activities outside of class.

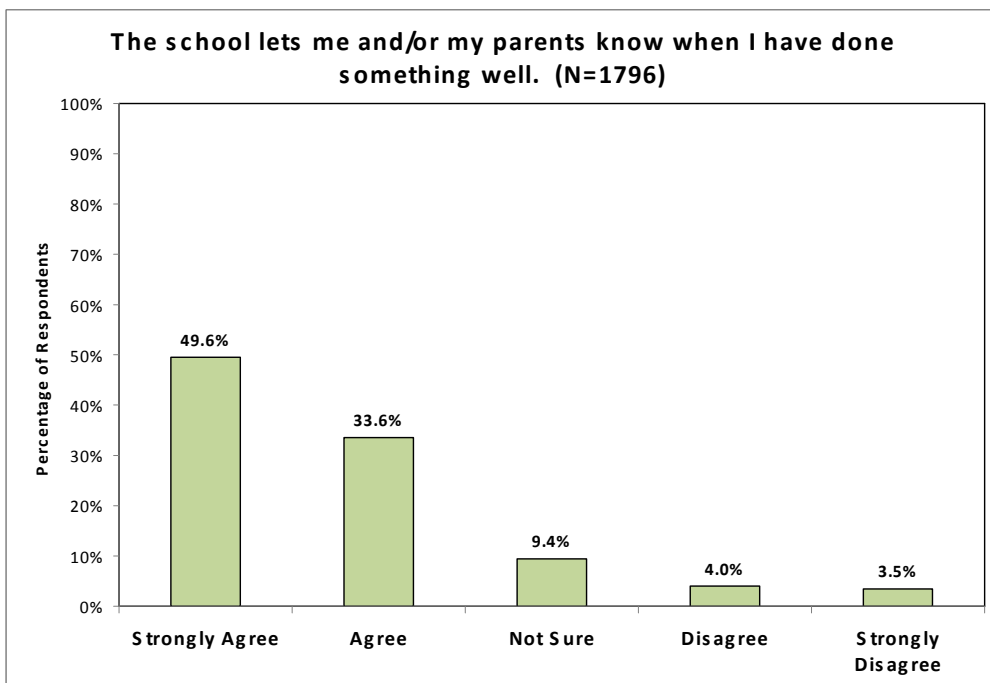


Figure 2. Positive feedback from school.

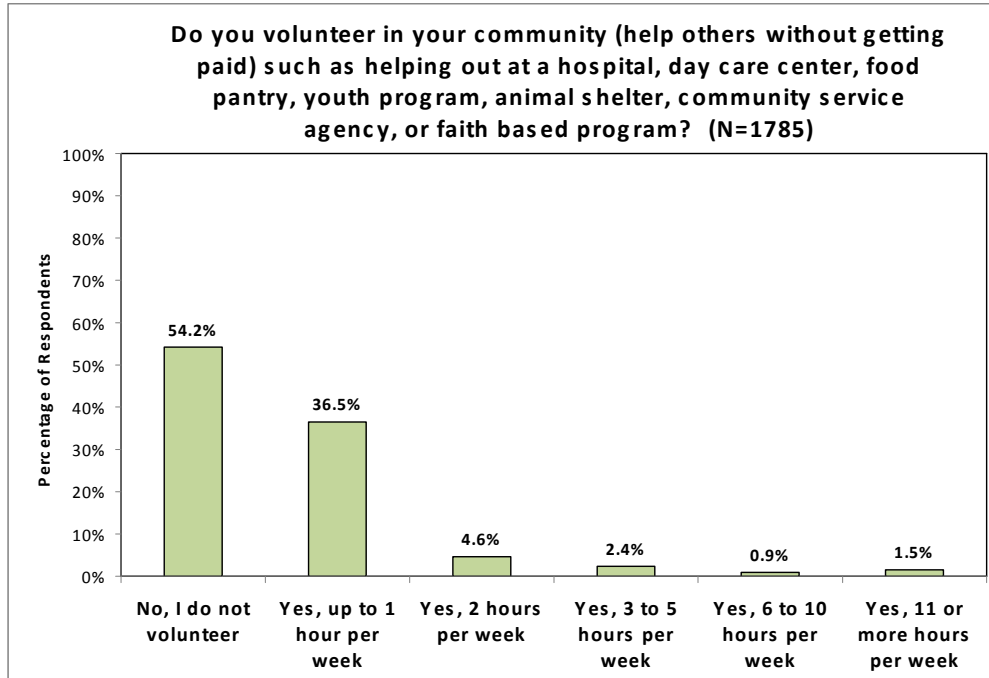


Figure 3. Volunteering in community.

Safety. The survey item pertaining to “safety” (“Have you ever missed school because you were afraid of being bullied?”), as shown in Figure 4, indicated that 91.8% (n = 1,667) had never missed school because they were afraid of being bullied, but 8.2% (n = 148) had missed school because they were afraid of being bullied. Although this body of research indicated that areas of concern would be mentioned if responses were 10% or greater, this item was viewed as important to include in the “areas of concern” for two reasons. This response embodies 148 youths who felt so threatened that they felt the need to miss school. Second, this particular area has a secondary impact on the youths’ academic performance. Both of these areas have the ability to impact the youths’ empowerment. Although the majority of students reported positively, there is a need for efforts to increase the sense of safety and hence empowerment for a portion of our youth.

Given these statistics, it is evident that there are a number of youth who could benefit from opportunities which can improve upon their sense of empowerment.

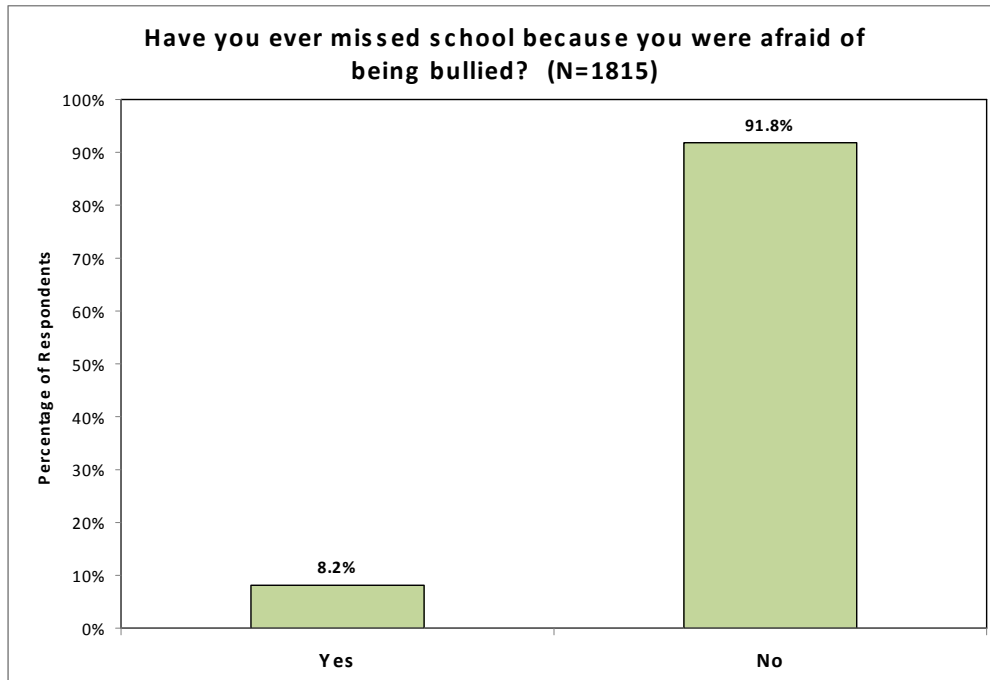


Figure 4. Missing school due to bullying.

Developmental Asset Building Block Area: Boundaries and Expectations

Family Boundaries. Again in the area of Family Boundaries, there was mixed response to the survey items. The overall responses indicated that 5 of the 8 survey items indicated positive external ecological assets. Between 92-97.1% of SWVAR 6th grade youth indicated positive responses to the following survey items:

- How wrong do your parents feel it would be for you to smoke cigarettes?
- My family has clear rules about alcohol use.
- How wrong do your parents feel it would be for you to smoke marijuana?
- My family has clear rules about drug use.
- How wrong do your parents feel it would be for you to break the law (steal, property damage, vandalism, picking a fight)?

Three of the five Family Boundary survey items were, however, of overall concern.

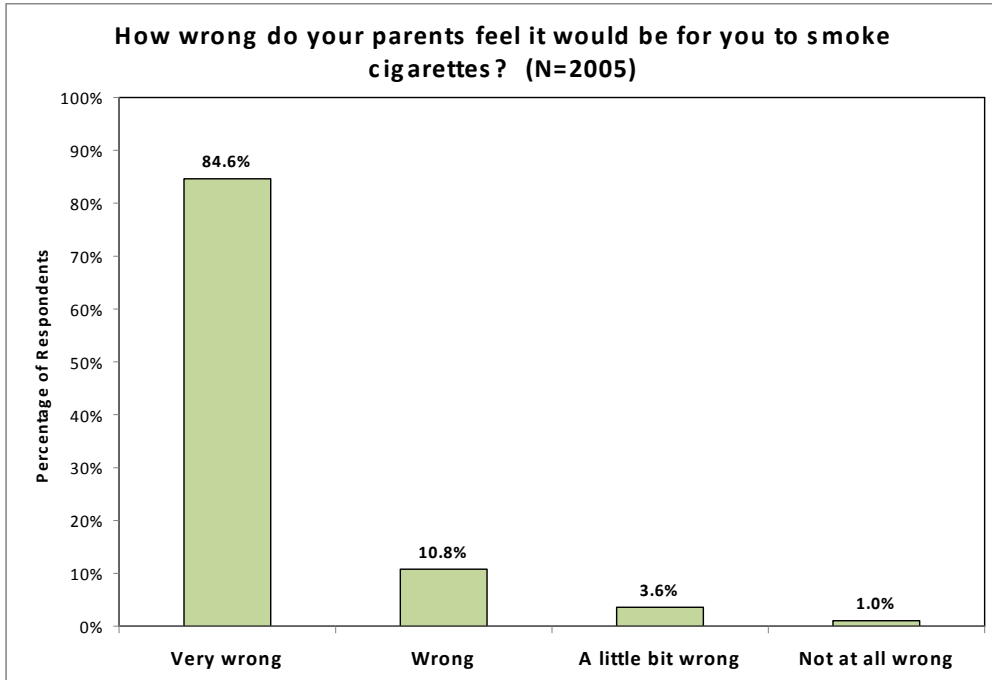


Figure 5. Parents' perceptions of smoking cigarettes.

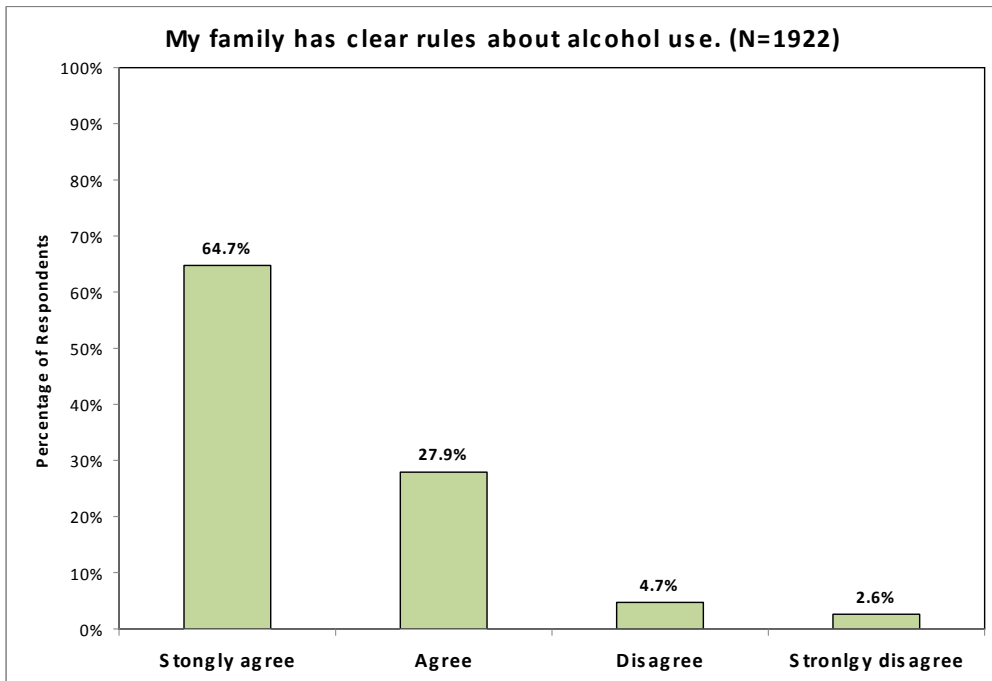


Figure 6. Family rules on alcohol use.

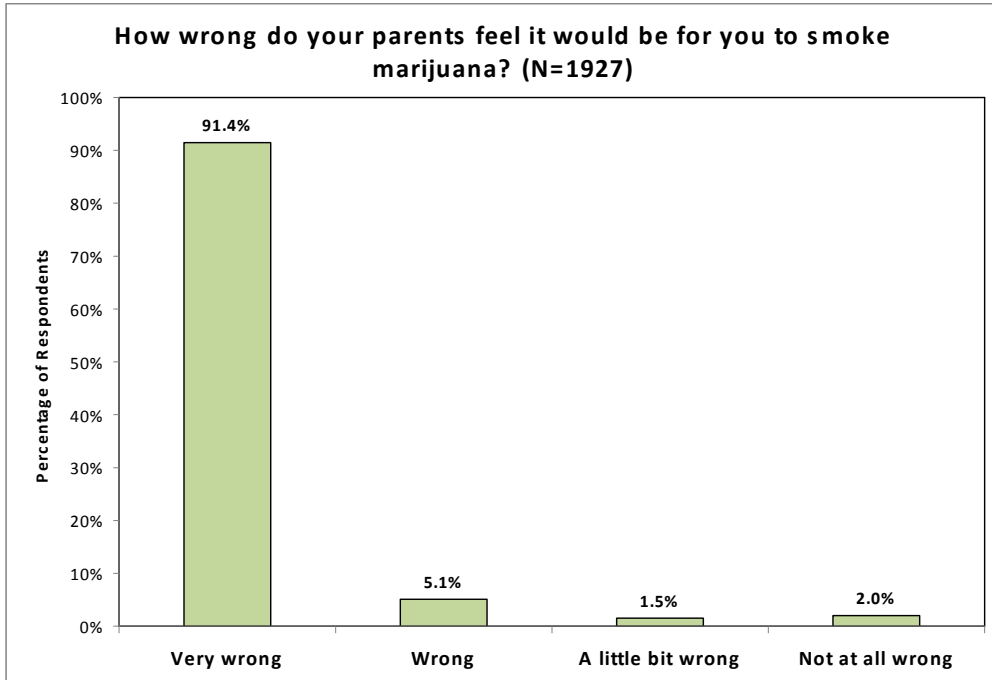


Figure 7. Parents' perceptions on marijuana.

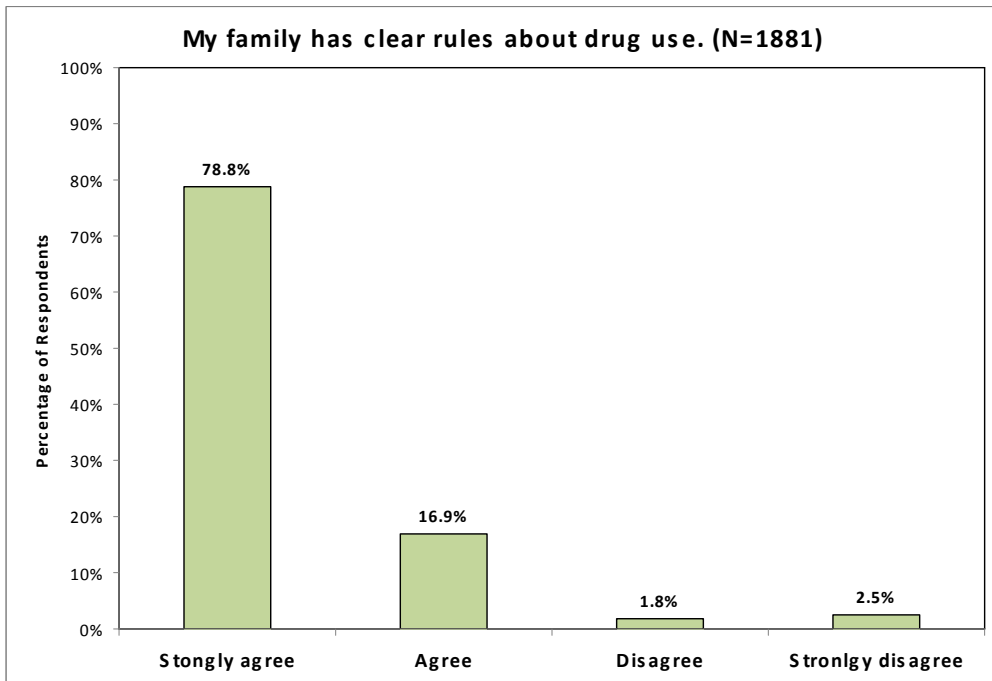


Figure 8. Family rules on drug use.

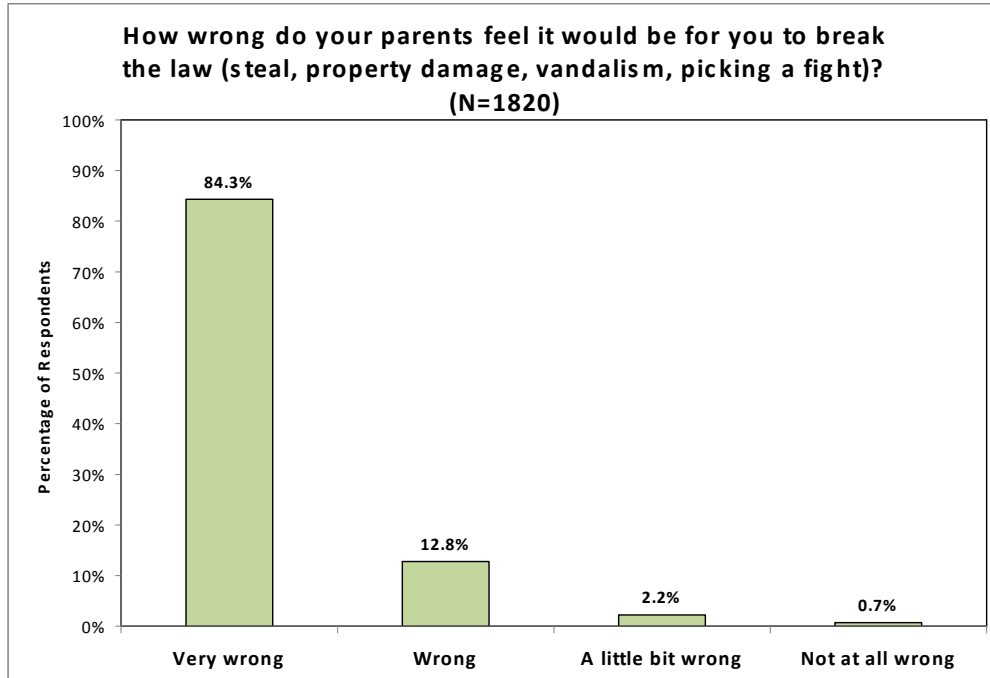


Figure 9. Parents' perceptions on breaking the law.

The first of these three areas, although it did not meet the 10% area of concern, was found to be on the cusp of this mark and was thought worthy of mention. Figure 10 shows that in response to the survey item “How wrong do your parents feel it would be for you to drink beer, wine or liquor (for example, vodka, whiskey, or gin) regularly (or at least twice a month)?”, 9.5% (n = 205) SWVAR 6th grade youth indicated that they perceived their parents only felt like such behavior was only “a little bit wrong” to “not at all wrong.”

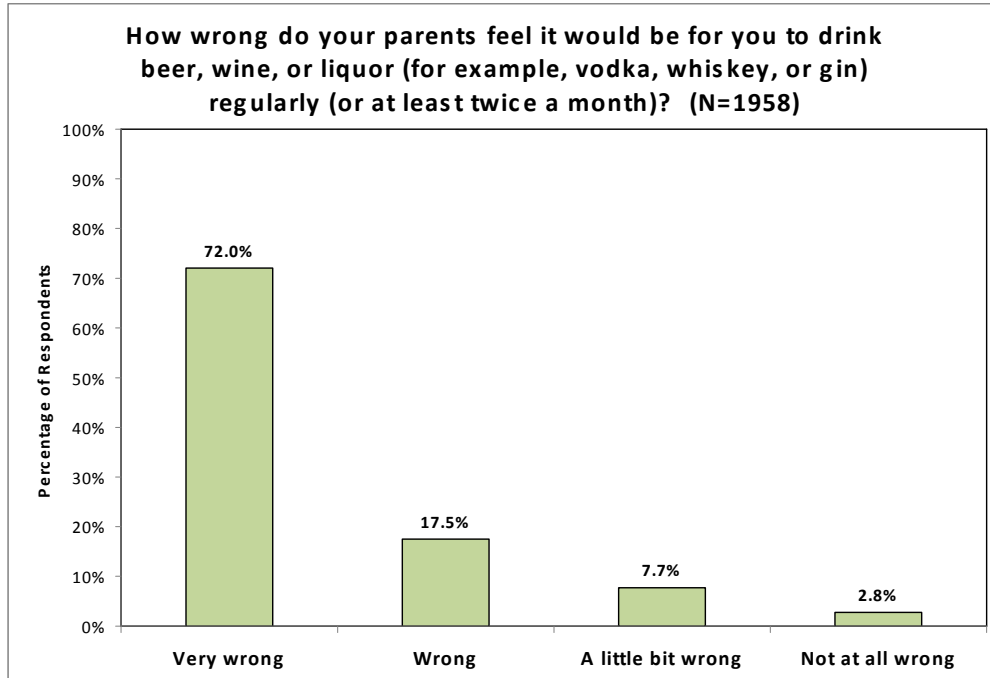


Figure 10. Parents' perceptions on drinking.

In response to the survey item “When not at home, one of my parents knows where I am and who I am with?”, Figure 11 shows that 10.3% (n = 216) of SWVAR 6th grade youth indicated that of their parents did not know where or who the youth was with.

Lastly, in response to the survey item “Would your parents know if you did not come home on time?”, Figure 12 shows that 12.3% (n = 216) of SWVAR 6th grade youth indicated that their parents would not know if they came home on time.

Given these responses, although the messages for such areas as smoking, use of drugs and law breaking seem to have sounded stronger for the greater majority, there is opportunity for improvement in communications as to the consequences of use of alcohol, and communications as to with whom the youths spends his or her time as well as the youths' whereabouts.

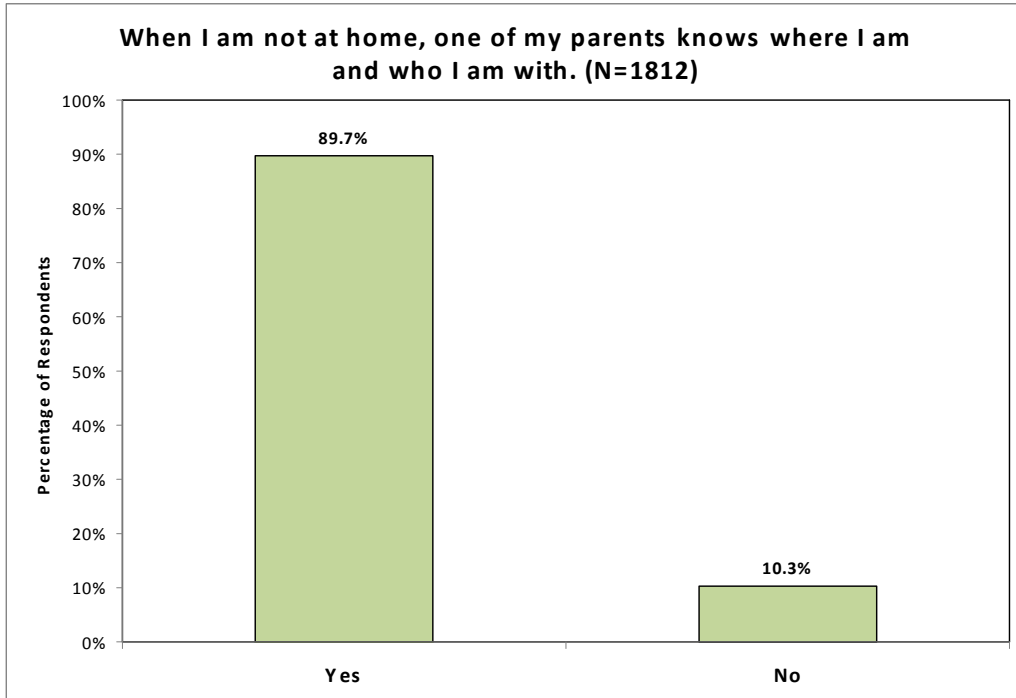


Figure 11. Parents knowing whereabouts.

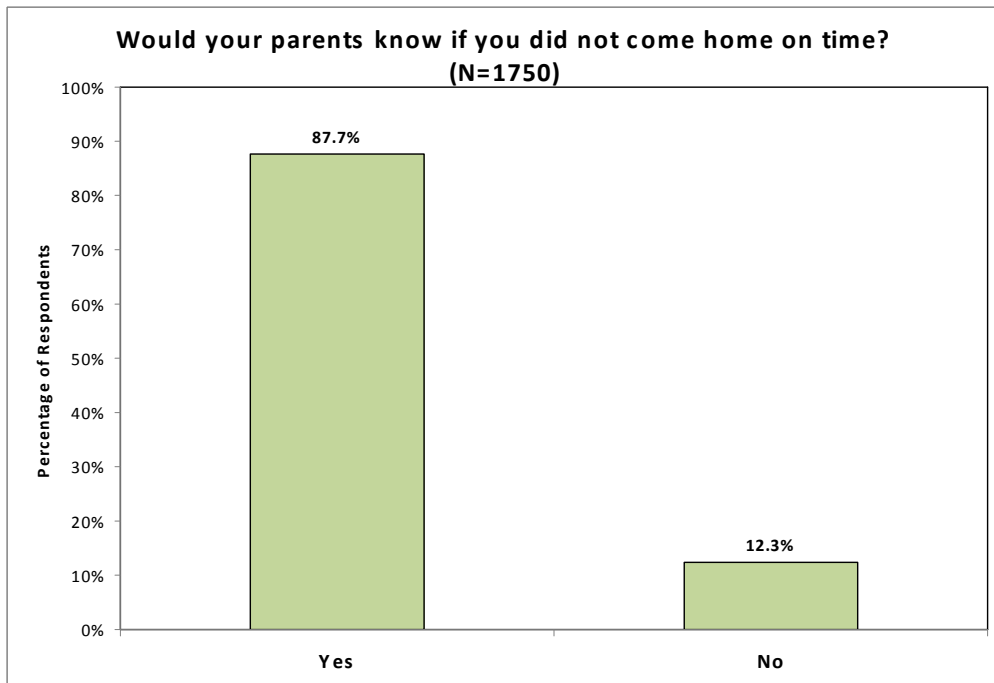


Figure 12. Parental awareness of curfew conformity.

Summary of Responses to RQ1: What is the current reported external ecological status of the SWVAR 6th grade youth? In response to RQ1, the responses provided by the SWVAR 6th grade youth indicate that the general external ecology as indicated by available survey items is that of a positive environment which indicates the presence of developmental assets. Six areas either exceeded or encroached upon exceeding 10% negative responses and offer opportunities to build upon existing community assets. It appears that although the majority of SWVAR 6th grade youth report positively, there is an opportunity to capture a larger body of youth.

RQ2: Is there a difference in the reported external ecology of SWVAR 6th grade youth by gender?

Using the total 6th grade youth respondents who indicated a gender (n = 2,045), a Chi-Square with a .05 significance level was utilized to analyze the 12 survey items selected for analysis. These items were classified according to the Developmental Assets Framework (Table 3).

Table 3 shows an overview of the areas found to be significant as well as areas of concern regarding the external ecology as reported by the total 6th grade participants who indicated a gender and responded to the survey item. Again in answering this research question, it was found that, overall, in all 12 survey items analyzed, the majority of the SWVAR 6th grade youth reported favorably or positively about their external ecological assets. There were five items that were found to have a significant difference by gender as well as seven areas of concern and each are elaborated upon below. Areas of concern are noted as responses were 10% or more of a specific gender body within SWVAR 6th grade youth indicated a negative response.

Table 3

External Ecology Report by Gender

Developmental Asset External Building Block	External Asset Area	Survey Item	Chi-square
Support	Caring School Climate	There are lots of chances for students in my school to get involved in sports, clubs, and other school activities outside of class. (n=1797, 87.87%)	$\chi^2(4, n=1797) = 6.012, p > .05$
		The school lets me and/or my parents know when I have done something well. (n=1793, 87.68%)	$\chi^2(4, n=1793) = 18.991, p = .001$
Empowerment	Service to Others	Do you volunteer in your community (help others without getting paid) such as helping out at a hospital, day care center, food pantry, youth program, animal shelter, community service agency, or faith based program? (n=1782, 87.14%)	$\chi^2(5, n=1782) = 9.496, p > .05$
	Safety	Have you ever missed school because you were afraid of being bullied? (n=1812, 88.61%)	$\chi^2(1, n=1812) = 4.925, p = .026$
Boundaries and Expectations	Family Boundaries	How wrong do your parents feel it would be for you to smoke cigarettes? (n=1999, 97.75%)	$\chi^2(3, n=1999) = 1.338, p > .05$
		How wrong do your parents feel it would be for you to drink beer, wine, or liquor (for example, vodka, whiskey, or gin) regularly (or at least twice a month)? (n=1953, 95.5%)	$\chi^2(3, n=1953) = 11.383, p = .010$
		My family has clear rules about alcohol use. (n=1918, 93.79%)	$\chi^2(3, n=1918) = 1.227, p > .05$
		How wrong do your parents feel it would be for you to smoke marijuana? (n=1922, 93.99%)	$\chi^2(3, n=1922) = 4.577, p > .05$
		My family has clear rules about drug use. (n=1877, 91.78%)	$\chi^2(3, n=1877) = 4.885, p > .05$
		When I am not at home, one of my parents knows where I am and who I am with. (n=1809, 88.46%)	$\chi^2(1, n=1809) = 6.064, p = .014$
		Would your parents know if you did not come home on time? (n=1747, 85.43%)	$\chi^2(1, n=1747) = .000, p > .05$
		How wrong do your parents feel it would be for you to break the law (steal, property damage, vandalism, picking a fight)? (n=1817, 88.85%)	$\chi^2(3, n=1817) = 12.666, p = .005$

Developmental Asset Building Block Area: Support

Caring School Climate. In response to the survey item pertaining to “Caring School Climate” (“There are lots of chances for students in my school to get involved in sports, clubs, and other school activities outside of class”), a 87.87% (n= 1,797) of SWVAR 6th grade youth (female: 46.16%, n = 944; male: 41.71%, n = 853) responded to this survey item. Chi-Square analysis indicated no significant difference ($p > .05$) in responses between genders for this survey item. However, Figure 13 shows that although the general response was positive with 89.5% of female respondents reporting strongly agree and agree and 91.6% of male respondents reporting strongly agree and agree, this response implied that 10.5% (n = 99) of female respondents were not sure, disagreed, or strongly disagreed with the statement. This response identifies an opportunity to build upon either communications regarding such offerings, encouraging engagement in such offerings, or explorations into alternative offerings to capture the interest of this body of youth.

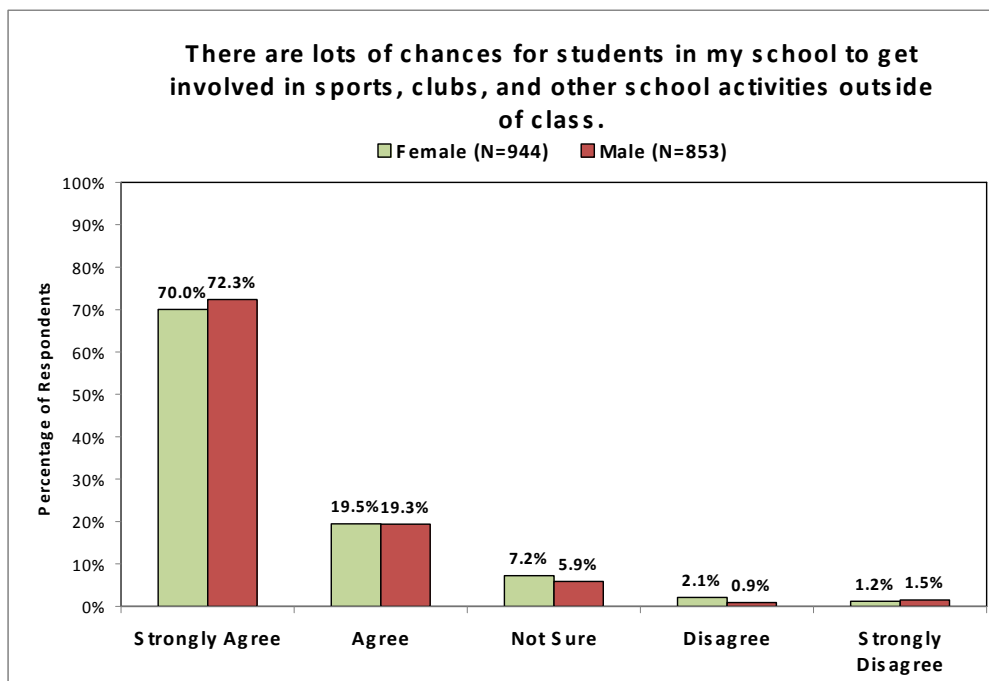


Figure 13. Involvement in activities outside of class by gender.

In response to the second item pertaining to “Caring School Climate” (“The school lets me and/or my parents know when I have done something well”), 87.68% (n= 1,793) of SWVAR 6th grade youth (female: 46.01%, n = 941; male: 41.66%, n =853) responded to this survey item. Chi-square analysis indicated a significant difference, $\chi^2(4, n = 1,793) = 18.991$, $p = .001$, in responses between genders for this survey item. Figure 14 shows that female respondents indicated 46.3% (n = 436) strongly agree, 35.3% (n = 332) agree, 10.5% (n = 99) not sure, and 5.2% (n = 49) disagree. Males indicated 53.1% (n = 452) strongly agree, 31.7% (n = 270) agree, 8.2% (n = 70), and 2.7% (n = 23) disagree. In this item, both female and male responses were not as favorable as in other survey item areas. Both genders (17.9% [n = 173] of females and 15.2% [n = 130] of males) responded that they were not sure, disagreed, or strongly disagreed with the statement. Here again, although the majority indicates a positive response, there is an opportunity to build upon existing assets which could capture the youth being missed.

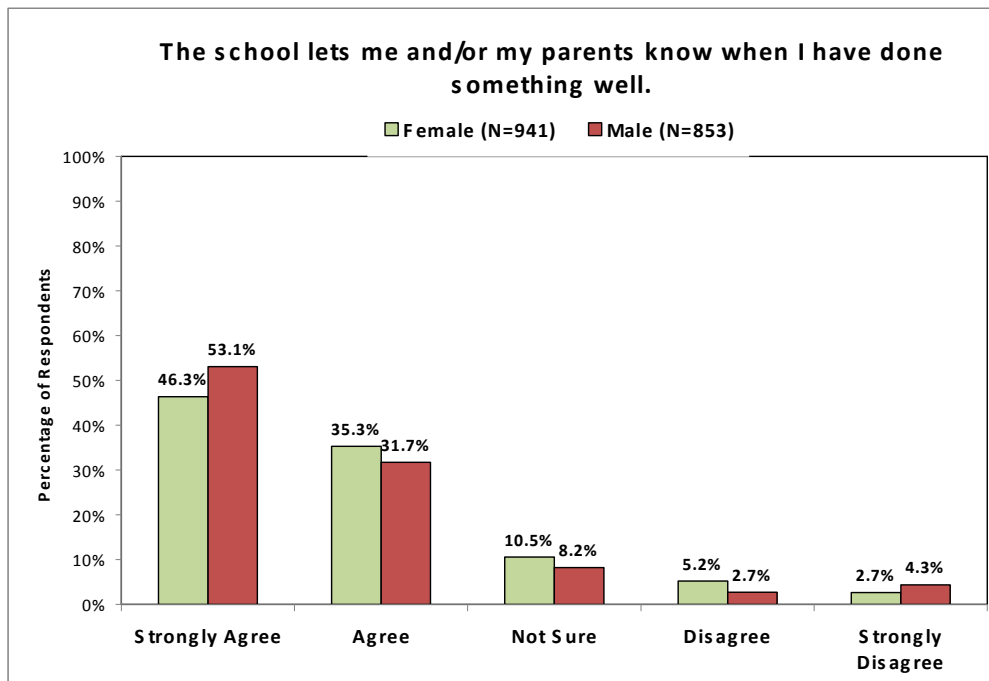


Figure 14. Positive feedback from school by gender.

In both instances, information pertaining school climate was gained which indicates that although the majority of SWVAR 6th grade youth indicates that they feel the school provides a caring climate, there are instances where improvement could be made.

Developmental Asset Building Block Area: Empowerment

Service to Others. In response to the two survey items pertaining to Empowerment (“service to others” and “safety”), a Chi-square analysis indicated there was no significant difference by gender, ($p > .05$); however, this area is of concern as the majority of respondents (females: 55.1%, $n = 514$; males: 53.0%, $n = 450$) indicated that they do not volunteer work at all (Figure 15). These responses are of concern as it is placed in the developmental asset category of “Empowerment” which suggests that by not encouraging or providing opportunities for youth to engage, they are missing a component of a powerful building block which enhances other areas.

Safety. In response to the survey item pertaining to “Safety” (“Have you ever missed school because you were afraid of being bullied?”), 88.61% ($n = 1,812$) of SWVAR 6th grade youth (female: 46.75%, $n = 956$; male: 41.86%, $n = 856$) responded to this item. Chi-Square analysis indicated a significant difference, $\chi^2(1, n = 1,812) = 4.925, p = .026$, in responses between genders for this survey item. Female respondents indicated 90.5% ($n = 865$) no and 9.5% ($n = 91$) yes. Male respondents indicated 93.3% ($n = 799$) no and 6.7% ($n = 57$) yes (Figure 15). Again in this item, due to its higher negative response and note of inclusion as an area of concern in RQ1, it was included as an area of concern for RQ2. Additionally, 9.5% ($n = 91$) of female respondents indicated that they had missed school because they were afraid of being bullied. With this report we begin to have clearer insights as to the SVWVAR 6th grade population having more difficulty in this area.

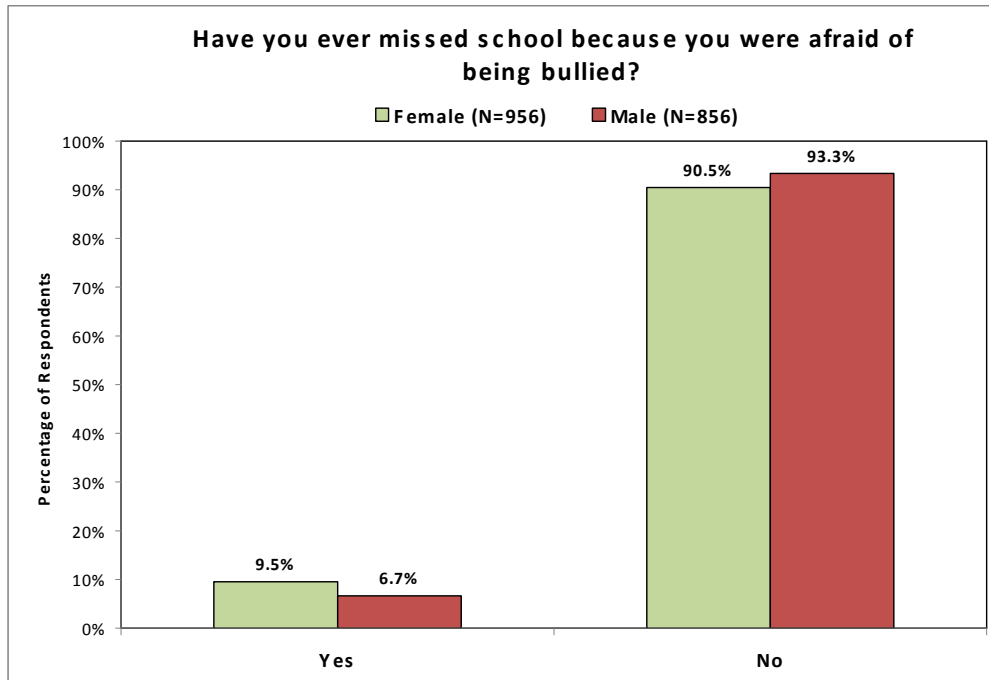


Figure 15. Missed school due to bullying by gender.

Developmental Asset Building Block Area: Boundaries and Expectations

Family Boundaries. In response to the survey item pertaining to “Family Boundaries,” three of the eight survey items pertaining to this area were found to be significant with regard to differences between genders as well as four areas of concern.

In response to survey item “How wrong do your parents feel it would be for you to drink beer, wine, or liquor (for example, vodka, whiskey, or gin) regularly (or at least twice a month?”, 95.5% (n=1,953) of SWVAR 6th grade youth (female: 49.14%, n = 1,005; male:46.36%, n = 948) responded to this item. Chi-Square analysis indicated a significant difference $\chi^2(3, n = 1953) = 11.383, p = .010$, in responses between genders for this survey item. Figure 16 shows that female respondents indicated 73.2% (n =73 6) very wrong, 17.9% (n = 180) wrong, 7.3% a little bit wrong, and 1.6% (n = 16) not wrong at all. Male respondents indicated 70.9% (n = 672) very wrong, 17% (n = 161) wrong, 8.1% (n = 77) a little wrong, and 4.0% (n = 38) not wrong at all. In this item, female respondents provided a

more positive response: 91.1% of female respondents indicated that they thought their parents viewed drinking alcoholic beverages regularly as wrong or very wrong, in contrast, male respondents indicating only 87.9% for this item. Here again, with regard to the male respondents, 12.1% (n = 115) males responded that they felt as though their parents thought that drinking alcoholic beverages regularly was only a little bit wrong or not wrong at all. As the responses are perceptions of the youth, the responses indicate either that parents of males do not disapprove of their sons partaking in alcoholic beverages as much as parents of females or the parents who perhaps do disapprove of such behaviors, regardless of child's gender, are not communicating their disapproval with their children.

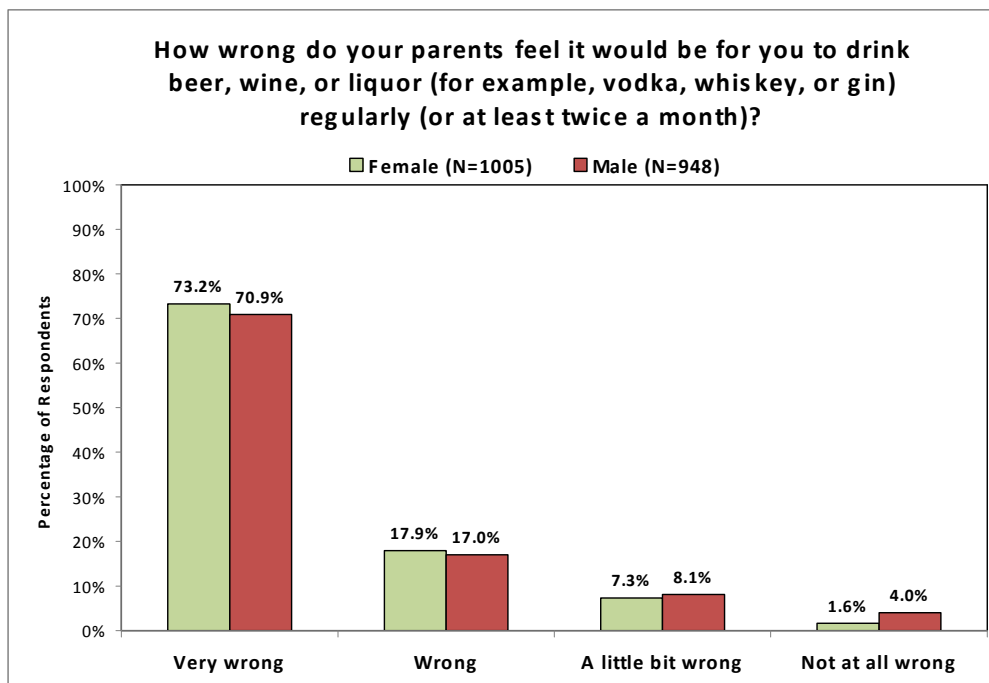


Figure 16. Parents' perceptions on drinking by gender.

In response to the survey item pertaining to “When I am not at home, one of my parents knows where I am and who I am with”, 88.46% (n= 1,809) of SWVAR 6th grade youth (female: 46.55%, n = 952; male: 41.91%, n = 857) responded to this item. Chi-Square analysis indicated a significant difference, $\chi^2(1, n = 1,809) = 6.064, p = .014$, in responses

between genders for this survey item. Figure 17 shows that female respondents indicated 91.4% (n = 870) yes and 8.6% (n = 82) no. Male respondents indicated 87.9% (n = 753) yes and 12.1% (n = 104) no. In this item, female respondents provided a more positive response: 91.4% of female respondents indicated that when they were not home, their parents knew where they were and who they were with versus their counterparts' male where only 87.9% indicated this same positive response. This indicates that 12.1% (n = 104) males perceived that when they were not home, their parents did not know where they were or who they were with. Again, in this item it becomes evident either that parents of males are either not as concerned about their male children whereabouts or social interactions as much as that of parents of female children, or that parents are not communicating their concern for such information with their male children.

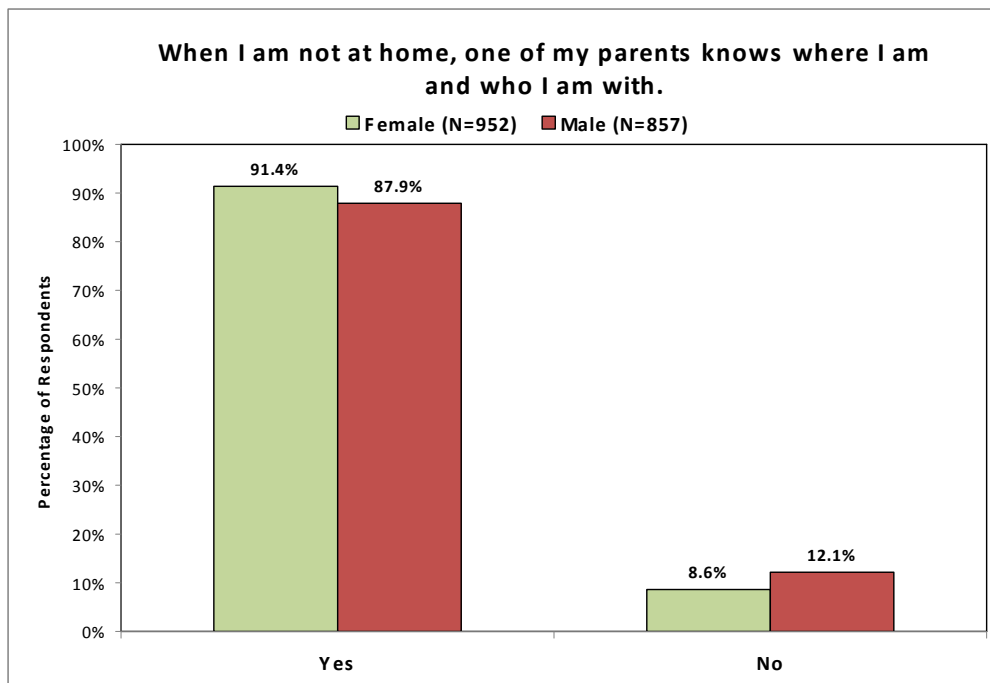


Figure 17. Parental awareness of whereabouts by gender.

In response to the survey item pertaining to “Would your parents know if you did not come home on time?”, 85.43% (n = 1,747) of SWVAR 6th grade youth (female: 44.74%, n =

915; male: 40.68%, n = 832) responded to this item. Chi-square analysis of this item indicated no significance ($p > .05$) with regard to gender; however, here again in this item, there was a concern. Responses indicated that 12.3% (n = 113) of female SWVAR 6th grade youth and 12.4% (n = 103) of male SWVAR 6th grade youth perceived that their parents would not know if they came home on time (Figure 18). In this item, both genders report concerning negative responses and indicate that either parents are not concerned with knowing when youths come home, or they are not expressing their concerns with their youth.

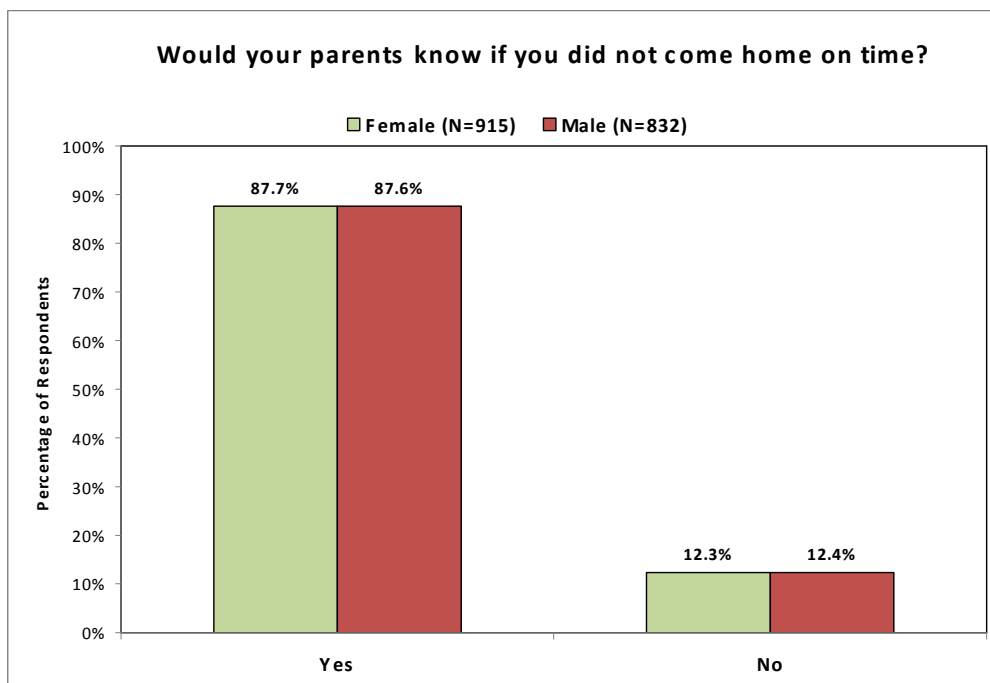


Figure 18. Parents' awareness of curfew conformity by gender.

Lastly, in response to the survey item pertaining to “How wrong do your parents feel it would be for you to break the law (steal, property damage, vandalism, picking a fight)?” 88.85% (n=1,817) of SWVAR 6th grade youth (female: 46.55%, n = 952; male: 42.30%, n = 865) responded to this item. Chi-Square analysis indicated a significant difference in responses between genders for this item. A significant Chi-square was found, $\chi^2(3, n = 1817) = 12.666, p = .005$. Figure 19 shows that female responses indicated 87% (n = 828) very

wrong, 10.5% (n = 100) wrong, 2.1% (n = 20) a little bit wrong, and .4% (n = 4) not wrong at all. Male respondents indicated 81.3% (n = 703) very wrong, 15.4% wrong, 2.3% (n = 20) a little bit wrong, and 1.0% (n = 9) not wrong at all. Again, in this item we see that males perceive their parents do not feel that breaking the law as wrong as that of females. As in the preceding items, this indicates that parents of males either do not feel it is as wrong for males to break the law, or they are not communicating this information to their male children.

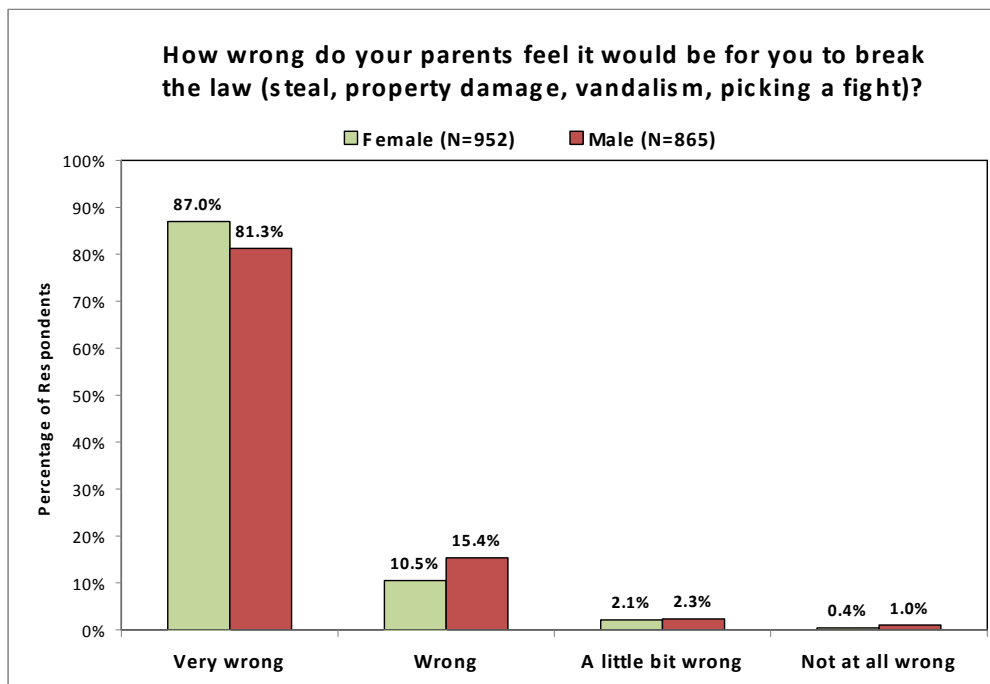


Figure 19. Parents' perceptions on breaking the law by gender.

A Chi-square analysis indicated no significant differences ($p > .05$) in the following survey items:

- There are lots of chances for students in my school to get involved in sports, clubs, and other school activities outside of class.
- Do you volunteer in your community (help others without getting paid) such as helping out at a hospital, day care center, food pantry, youth program, animal shelter, community service agency, or faith based program?

- How wrong do your parents feel it would be for you to smoke cigarettes?
- My family has clear rules about alcohol use.
- How wrong do your parents feel it would be for you to smoke marijuana?
- My family has clear rules about drug use.
- Would your parents know if you did not come home on time?

Summary of Responses to RQ2: Are there differences in the reported external ecology of SWVAR 6th grade youth by gender? In response to RQ2, the overall majority of responses provided by the SWVAR 6th grade youth, as represented by available survey items and as represented by gender indicate the presence of many developmental assets. This presence of assets promotes and indicates a positive external ecology for the youth; however, there are differences within each of the External Building Block areas. It appears that although the majority of males and females SWVAR 6th grade youth indicated positive responses there is an opportunity to capture a larger body of youth by addressing gender specific areas.

The results of the analysis of the survey items indicated that there are statistically significant differences in the reported external ecology of SWVAR 6th grade youth by gender and does not occur merely by chance (Table 3).

RQ3: Are there differences in the reported external ecology of SWVAR 6th grade youth by race/ethnicity?

Using the total 6th grade youth respondents who indicated a race/ethnicity (n = 1,895), a Chi-Square with a .05 significance level was utilized to analyze the 12 survey items selected for analysis. These items were classified according to the Developmental Assets Framework (Table 4).

Table 4

External Ecology Report by Race/Ethnicity

Developmental Asset External Building Block	External Asset Area	Survey Item	Chi-Square
Support	Caring School Climate	There are lots of chances for students in my school to get involved in sports, clubs, and other school activities outside of class. (n=1668, 88.02%)	$\chi^2(20, n=1668)= 69.255, p<.001$
		The school lets me and/or my parents know when I have done something well. (n=1665, 87.86%)	$\chi^2(20, n=1665)= 55.899, p<.001$
Empowerment	Service to Others	Do you volunteer in your community (help others without getting paid) such as helping out at a hospital, day care center, food pantry, youth program, animal shelter, community service agency, or faith based program? (n=1655, 87.34%)	$\chi^2(25, n= 1655)= 93.233, p<.001$
	Safety	Have you ever missed school because you were afraid of being bullied? (n=1684, 88.87%)	$\chi^2 (5, n=1684)= 3.248, p>.05$
Boundaries and Expectations	Family Boundaries	How wrong do your parents feel it would be for you to smoke cigarettes? (n=1852, 97.73%)	$\chi^2(15, n=1852)= 33.953, p=.003$
		How wrong do your parents feel it would be for you to drink beer, wine, or liquor (for example, vodka, whiskey, or gin) regularly (or at least twice a month? (n= 1812, 95.62%)	$\chi^2 (15, n=1812)= 14.550, p>.05$
		My family has clear rules about alcohol use. (n= 1778, 93.83%)	$\chi^2(15, n=1778)= 54.836, p<.001$
		How wrong do your parents feel it would be for you to smoke marijuana? (n= 1784, 94.14%)	$\chi^2(15, n=1784)= 57.170, p<.001$
		My family has clear rules about drug use. (n=1740, 91.82%)	$\chi^2(15, n=1740)= 44.148, p<.001$
		When I am not at home, one of my parents knows where I am and who I am with. (n= 1682, 88.76%)	$\chi^2 (5, n=1682)= 9.162, p>.05$
		Would your parents know if you did not come home on time? (n= 1626, 85.8%)	$\chi^2 (5, n=1682)= 7.193, p>.05$
		How wrong do your parents feel it would be for you to break the law (steal, property damage, vandalism, picking a fight)? (n=1687, 82.25%)	$\chi^2 (15, n=1687)= 9.463, p>.05$

Table 4 shows an overview of the areas that were found to be significant and or areas of concern regarding the external ecology as reported by the total 6th grade participants who indicated a race/ethnicity and responded to the survey item. Once again, in all 12 survey items analyzed, the majority of the SWVAR 6th grade youth reported favorably or positively about their external ecological assets when reviewing positive and negative responses. Areas of concern are noted as responses were 10% or more of a specific gender body within SWVAR 6th grade youth indicated a negative response. As identified in table 4, there were seven areas found to have statistical significance and ten areas of concern.

Developmental Asset Building Block Area: Support

Caring School Climate. In response to the survey item “There are lots of chances for students in my school to get involved in sports, clubs, and other school activities outside of class”, 88.92% (n=1,668) of SWVAR 6th grade youth (American Indian or Alaska Native: 3.48%, n = 66; Asian: 2.27%, n = 43; Black or African-American: 13.93%, n = 264; Hispanic or Latino: 2.74%, n = 52; Native Hawaiian or Other Pacific Islander: 1.27%, n = 24; White: 64.33%, n = 1,219) responded to this survey item. Figure 20 indicates the responses provided by ethnicity. Chi-Square analysis indicated a significant difference, $\chi^2(20, n = 1,668) = 69.255, p < .001$, in responses between race/ethnicities for this survey item.

In addition to demonstrating a significant Chi-square, certain racial/ethnicity classifications indicated a greater than 10% negative response. American Indian or Alaska Native (10.6%, n = 7), Black or African American (17.8%, n = 47), and Hispanic or Latino (21.1%, n = 11), indicated that they were not sure, disagreed, or strongly disagreed that there were lots of chances for students at their school to get involved in sports. Although there was an overall positive majority, these responses indicate the ability to improve upon

communications of available activities and/or to expand upon the offerings available that might capture the interests of these groups.

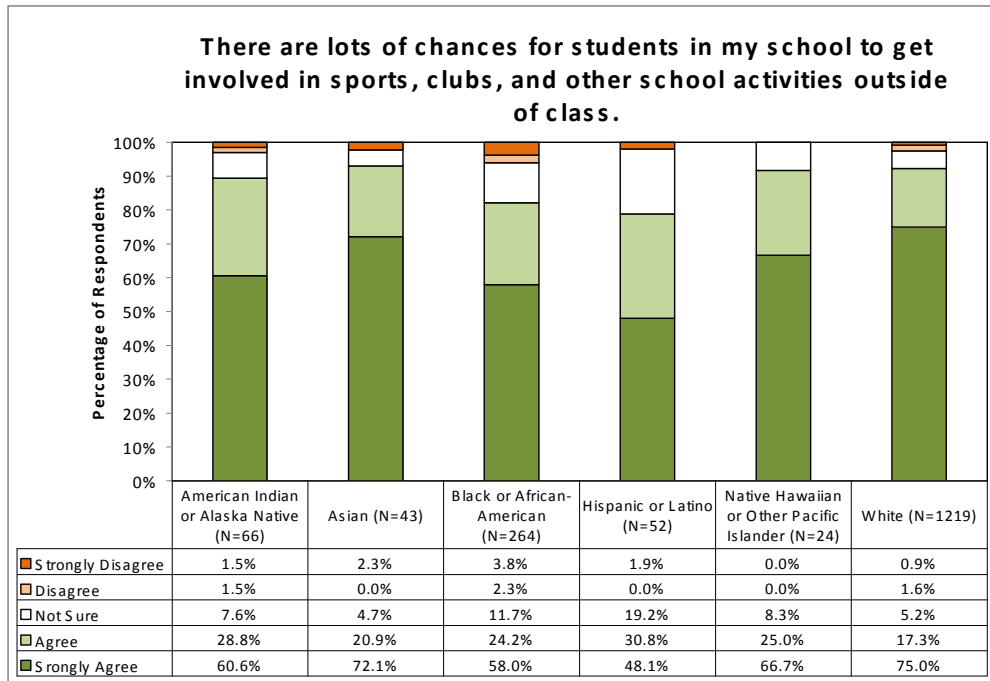


Figure 20. Involvement in activities outside of class by ethnicity.

In response to survey item “The school lets me and/or my parents know when I have done something well”, 87.86% (n=1,665) of SWVAR 6th grade youth (American Indian or Alaska Native: 3.48%, n = 66; Asian: 2.27%, n = 43; Black or African-American: 13.88%, n = 263; Hispanic or Latino: 2.69%, n = 51; Native Hawaiian or Other Pacific Islander: 1.27%, n = 24; White: 64.27%, n = 1218) responded to this survey item. Chi-square analysis indicated a significant difference, $\chi^2(20, n = 1,665) = 55.899, p < .001$, in responses between race/ethnicities for this survey item. In addition to demonstrating a significant Chi-square, as shown in Figure 21, all six racial/ethnicity classifications indicated a greater than 10% negative response. This again, demonstrates a consistent opportunity for improvement in either the communications of performance or communications to the youth that such communication interactions are occurring.

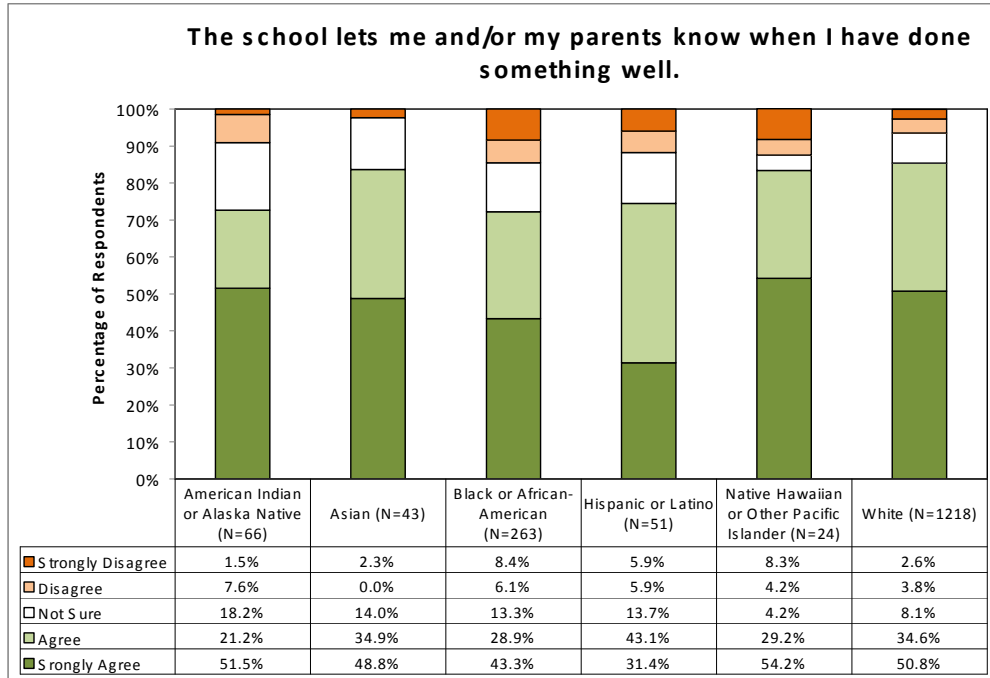


Figure 21. Positive feedback from school by ethnicity.

Developmental Asset Building Block Area: Empowerment

Service to Others. In response to survey item “Do you volunteer in your community (help others without getting paid) such as helping out at a hospital, day care center, food pantry, youth program, animal shelter, community service agency, or faith based program?”, 87.34% (n=1,655) of SWVAR 6th grade youth (American Indian or Alaska Native: 3.43%, n = 65; Asian: 2.27%, n = 43; Black or African-American: 13.72%, n = 260; Hispanic or Latino: 2.64%. n = 50; Native Hawaiian or Other Pacific Islander: 1.21%, n = 23; White: 64.06%, n = 1214) responded to this item. Chi-Square analysis indicated a significant difference, $\chi^2(25, n = 1,655) = 93.233, p < .001$, in responses between race/ethnicities for this survey item. Again in this item, as shown in Figure 22, the majority of respondents indicate they do no volunteer work. Of interest is that on the greater end of the volunteer spectrum, American Indian or Alaska Native reported the greatest hours of volunteer services with 6.2% (n = 4) indicating 6 to 10 hours per week and 4.6% (n = 3) indicating 11 hours or more

per week. The second racial classification of interest was that of Black or African American with 2.7% (n = 7) indicating 6 to 10 hours per week and 3.8% (n = 10) indicating 11 hours or more per week. This item offers an opportunity for further exploration. There are certainly indications of assets as well as opportunities of improvement that might be learned through further investigation of these specific racial and ethnic groups.

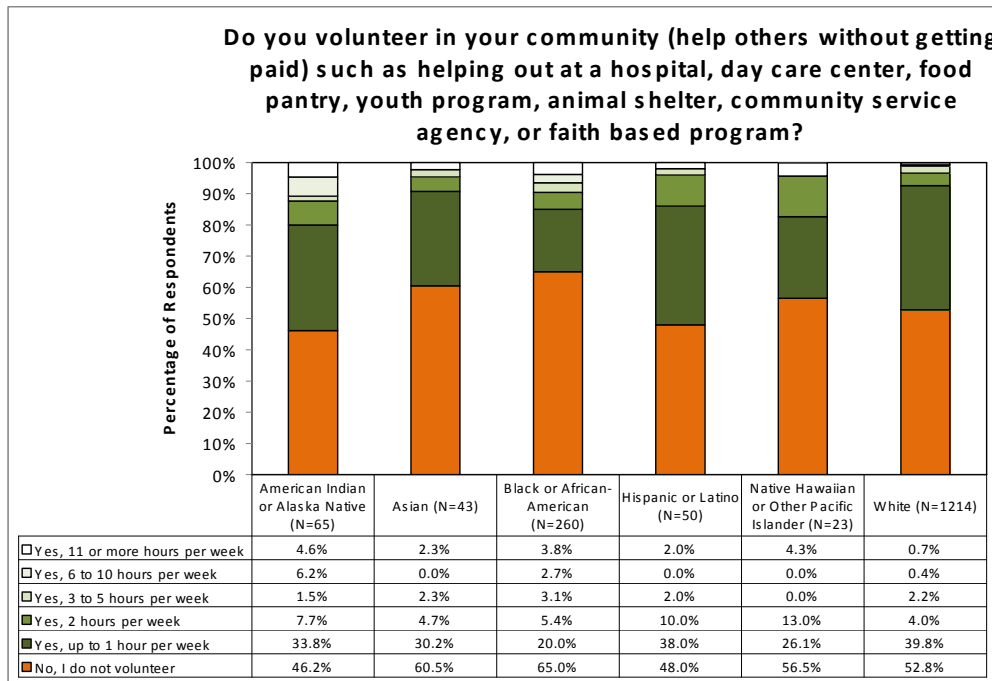


Figure 22. Volunteering in community by ethnicity.

Safety. Figure 23 indicates the responses by race/ethnicity to “Have you ever missed school because you were afraid of being bullied?”. A total of 80.69% (n= 1,655) of SWVAR 6th grade youth responded to this item. Although survey item “Have you ever missed school because you were afraid of being bullied?” did not indicate a significant difference ($p > .05$) among race/ethnicities, of concern, however, was that 3 of the 5 race/ethnicity classifications indicated a greater than 10% negative response to this survey item. The youth, 10.4% (n = 7) of American Indian or Alaska Natives, 10.3 (n = 27) of Black or African Americans, and 12.5% (n = 3) of Native Hawaiian or Other Pacific Islanders,

responded that they had missed school because they were afraid of being bullied at school. As this area indicates a safety as well as academic issue, there is an opportunity to impact a greater whole if appropriately addressed.

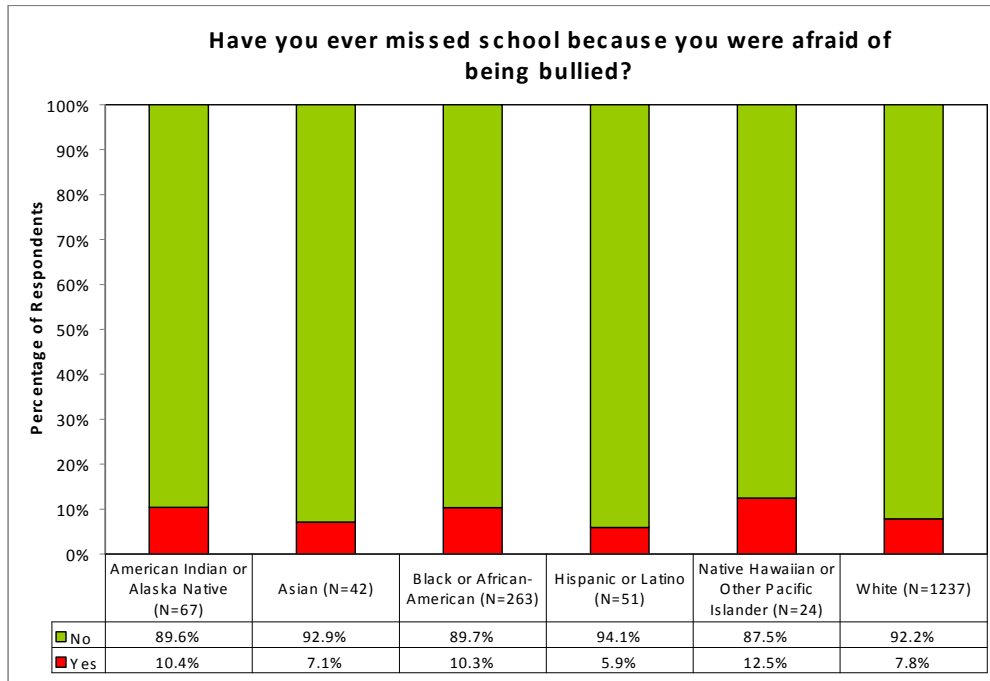


Figure 23. Missed school due to bullying by ethnicity.

Developmental Asset Building Block Area: Boundaries and Expectations

Family Boundaries. In response to survey item “How wrong do your parents feel it would be for you to smoke cigarettes?” 97.73% (n= 1,852) of SWVAR 6th grade youth (American Indian or Alaska Native: n = 79, 4.17%; Asian: n = 46, 2.43%; Black or African-American: n = 327, 17.26%; Hispanic or Latino: n = 54, 2.85%; Native Hawaiian or Other Pacific Islander: n = 27, 1.42%; White: n = 1,319, 69.6%) responded to this item. Chi-Square analysis indicated a significant difference, $\chi^2(15, n = 1,852) = 33.953, p = .003$, in responses between race/ethnicities for this survey item. In addition to demonstrating a significant Chi-square, as shown in Figure 24, racial/ethnicity classifications indicated a greater than 10% negative response for that of Native Hawaiian or Other Pacific Islander. 11.1% (n = 3) in that

they perceived their parents would feel it would be either a little bit wrong to not wrong at all for the youth to smoke cigarettes. This area offers an opportunity for further investigation as well. As these responses indicate the youths’ perception, this response indicates that at least some parents of youths in the Native Hawaiian or Other Pacific Islander population either do not disapprove of smoking, or do not communicate effectively the disapproval of such behaviors.

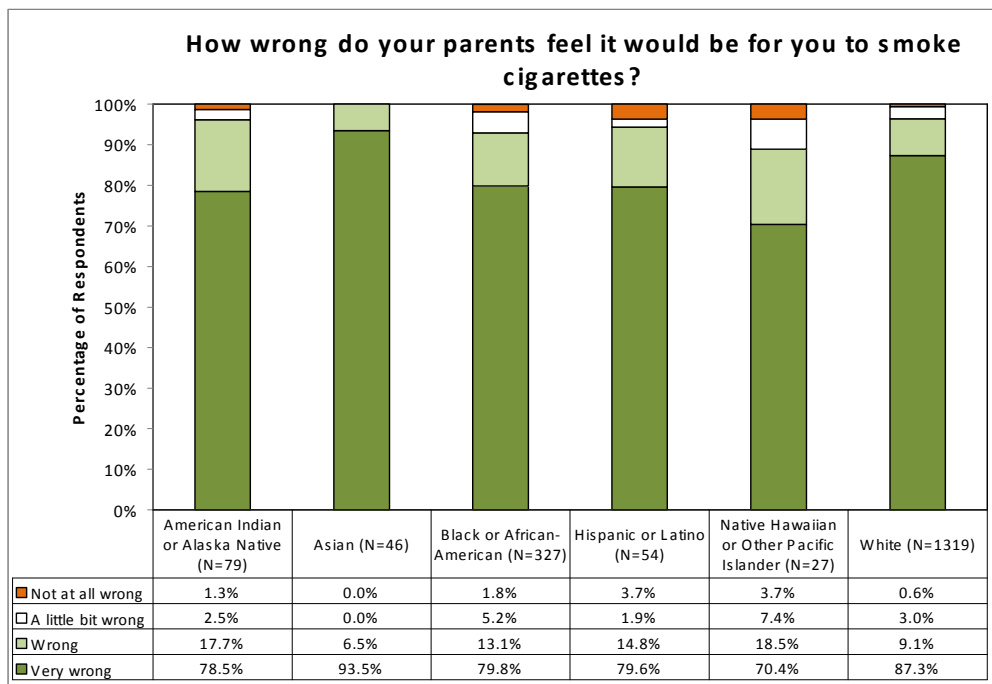


Figure 24. Parents' perceptions on smoking cigarettes by ethnicity.

In the second item pertaining to family boundaries, Figure 25 indicates the responses by race/ethnicity to “How wrong do your parents feel it would be for you to drink beer, wine, or liquor (for example, vodka, whiskey, or gin) regularly (or at least twice a month?)”. A total of 90.29% (n=1,852) responded to this item. Although this survey item did not indicate a significant difference among race/ethnicities ($p > .05$), of concern was that 3 of the 5 race/ethnicity classifications reported greater than 10% negative response. Responses include 10.8% (n = 8) of American Indian or Alaska Natives, 12.4% (n = 38) of Black or African

Americans, and 18.2% (n = 10) of Hispanic or Latinos indicated they perceived that their parents viewed regular alcohol use by the youth as only a little bit wrong or not wrong at all. Again, in this item, further investigation could yield more specific data. As the response indicates either that some parents in these populations, in fact do not disapprove of such behaviors or either disapproves of the behavior and do not communicate such disapproval effectively to their children.

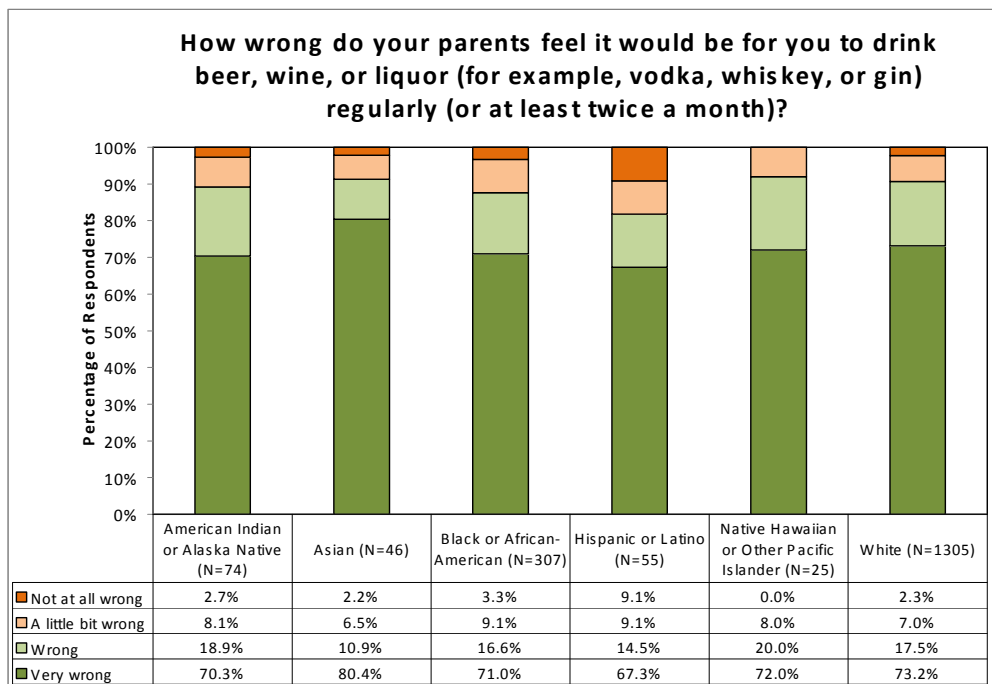


Figure 25. Parents' perceptions on drinking by ethnicity.

In response to survey item “My family has clear rules about alcohol use”, 93.83% (n=1,778) of SWVAR 6th grade youth (American Indian or Alaska Native: 3.69%, n = 70; Asian: 2.27%, n = 43; Black or African-American: 15.62%, n = 296; Hispanic or Latino: 2.9%, n = 55; Native Hawaiian or Other Pacific Islander: 1.27%, n = 24; White: 68.07%, n = 1,290) responded to this item. Chi-Square analysis indicated a significant difference $\chi^2(15, n = 1,778) = 54.836, p < .001$, in responses between race/ethnicities for this survey item. In addition to a significant difference, Figure 26 shows racial/ethnicity classifications Black or

African American and Hispanic or Latino indicated a greater than 10% negative response. 14.5% (n = 43) of Black or African American and 10.9% (n = 6) of Hispanic or Latino youths indicated either that they either disagreed or strongly disagreed with this statement. Again, in this item, there is an opportunity for improvement as some parents in these populations either do not have clear rules or have not communicated these rules effectively to their children.

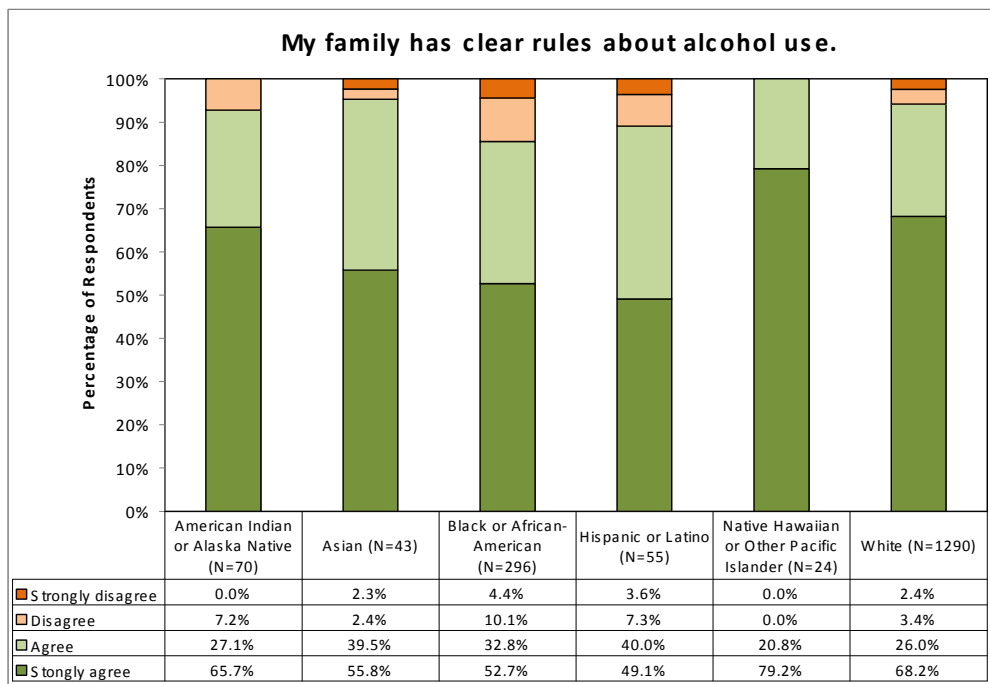


Figure 26. Family rules on alcohol use by ethnicity.

In response to survey item “How wrong do your parents feel it would be for you to smoke marijuana?”, 94.14% (n= 1,784) of SWVAR 6th grade youth (American Indian or Alaska Native: 3.75%, n = 71; Asian: 2.37%, n = 45; Black or African-American: 15.41%, n = 292; Hispanic or Latino: 2.9%, n = 55; Native Hawaiian or Other Pacific Islander: 1.32%, n = 25; White: 68.39%, n = 1,296) responded to this item. Chi-Square analysis indicated a significant difference $\chi^2(15, n = 1,784) = 57.170, p < .001$, in responses between race/ethnicity for this survey item. In addition to demonstrating a significant Chi-square,

Figure 27 shows racial/ethnicity classification Native Hawaiian or Other Pacific Islander indicated a greater than 10% negative response with 12.0% (n = 3) responding that they perceived that their parents would feel it was only a little bit wrong to smoke marijuana. Here again, there is a need to understand whether the child perceptions are correct in that their parents do view smoking marijuana a only a little wrong, or if there is disapproval that is not being effectively communicated.

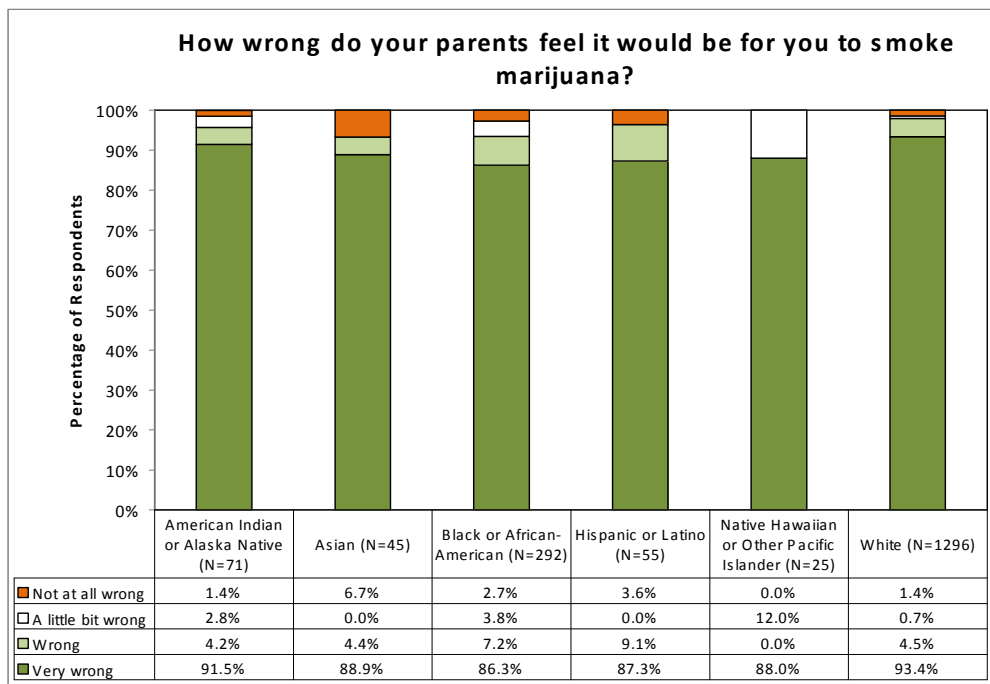


Figure 27. Parents' perceptions on marijuana by ethnicity.

Figure 28 shows the responses to survey item “My family has clear rules about drug use.” A total of 91.82% (n= 1,740) of SWVAR 6th grade youth (American Indian or Alaska Native: 3.53%, n = 67; Asian: 2.37%, n = 45; Black or African-American: 14.62%, n = 277; Hispanic or Latino: 2.8%, n = 53; Native Hawaiian or Other Pacific Islander: 1.27%, n = 24; White: 67.23%, n = 1,274) responded to this item. Chi-Square analysis indicated a significant difference $\chi^2(15, n = 1740) = 44.148, p < .001$, in responses between race/ethnicities for this survey item. In addition to finding a significant difference in race/ethnicity classifications, a

greater than 10% negative response was indicated for Hispanic or Latino youths: 13.2% (n= 7) of Hispanic or Latino youths indicated that either they disagreed or strongly disagreed with this statement. Again, in this area, there is opportunity for further investigation as well as improvement as there is a need to understand if some portion of the Hispanic or Latino parents themselves are not certain as to what should be taught or whether communications simply need to be improved upon.

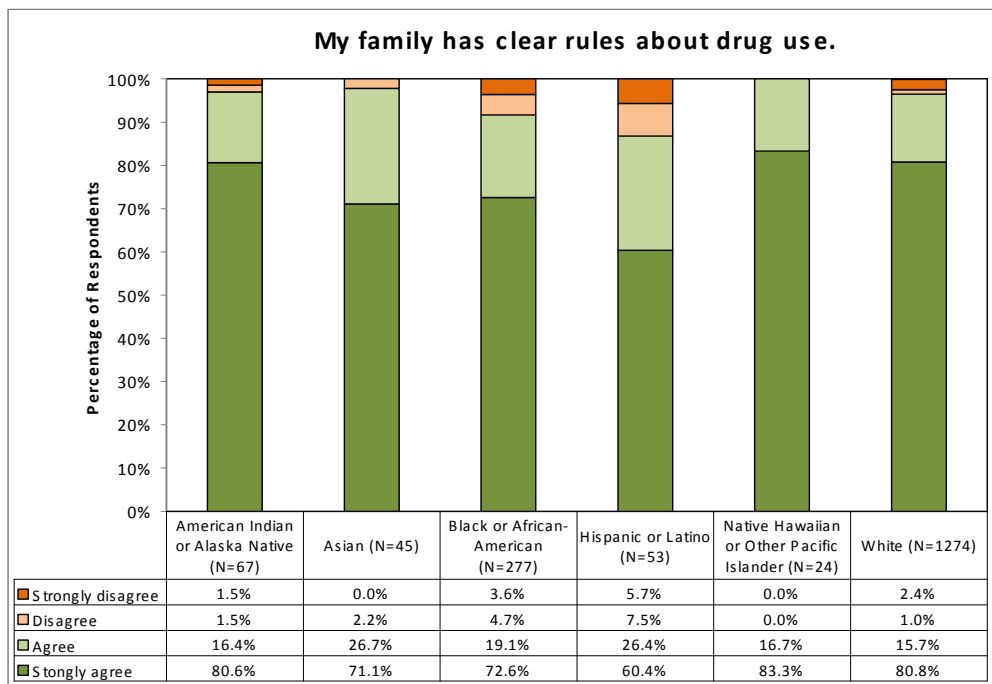


Figure 28. Family rules on drug use by ethnicity.

Lastly, in response to “When I am not at home, one of my parents knows where I am and who I am with” 88.76% (n = 1,682) of SWVAR 6th grade youth (American Indian or Alaska Native 3.54%, n = 67; Asian: 2.67%, n = 43; Black or African-American: 13.93%, n = 264; Hispanic or Latino: 2.74%, n = 52; Native Hawaiian or Other Pacific Islander: 1.27%, n = 24; White: 65.01%, n = 1,232) responded to this item. A Chi-square indicated no significant difference ($p > .05$). However, here again as shown in Figure 29, of concern was the response indicated by 4 of the 5 race/ethnicity classifications which indicated a greater

than 10% negative response rate. Of the respondents, 10.4% (n = 7) of American Indian or Alaska Natives, 18.6% (n = 8) of Asians, 12.1% (n = 32) of Black or African Americans, 11.5% (n = 6) of Hispanic or Latinos, and 20.8% (n = 5) of Native Hawaiian or Other Pacific Islanders responded that when not at home, one of their parents would not know where they were or who they were with. This report indicates a need for better communication efforts between parents and children.

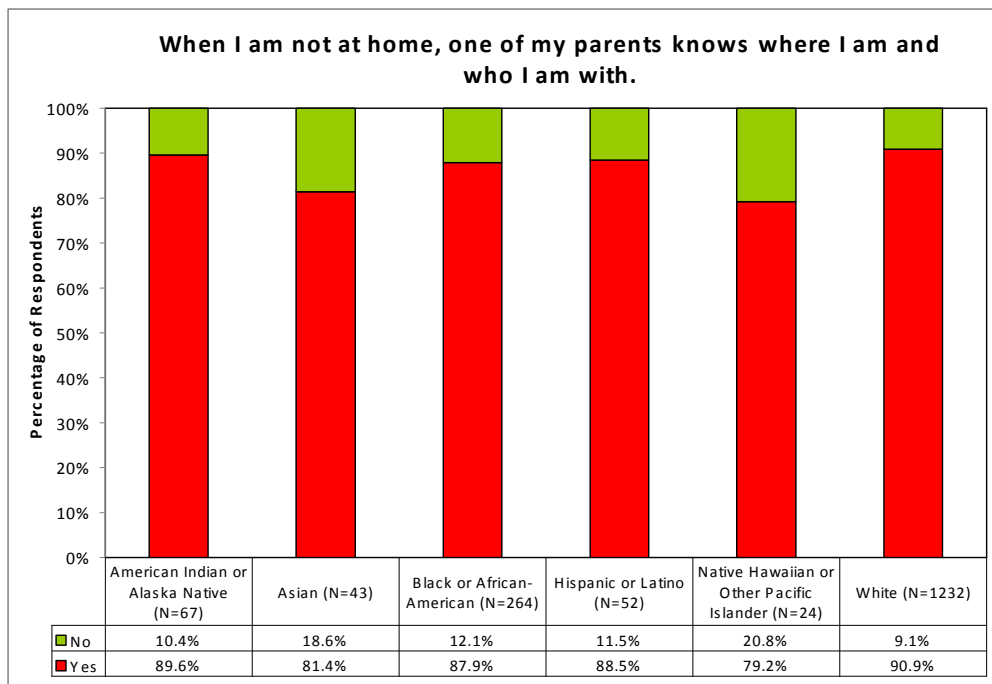


Figure 29. Parents' awareness of whereabouts by ethnicity.

A Chi-square analysis indicated no significant differences ($p > .05$) in the following survey items:

- Have you ever missed school because you were afraid of being bullied?
- How wrong do your parents feel it would be for you to drink beer, wine, or liquor (for example, vodka, whiskey, or gin) regularly (or at least twice a month?)

- When I am not at home, one of my parents knows where I am and who I am with.
- Would your parents know if you did not come home on time?
- How wrong do your parents feel it would be for you to break the law (steal, property damage, vandalism, picking a fight)?

Summary of Responses to RQ3: Are there differences in the reported external ecology of SWVAR 6th grade youth by race/ethnicity? In response to RQ3, the overall majority of responses provided by the SWVAR 6th grade youth as represented by race/ethnicity indicate the presence of many developmental assets, as indicated by available survey items. As in gender, this presence of assets promotes and indicates a positive external ecology for the youth however, there are differences within each of the External Building Block areas by race/ethnicity. This positive response indicates the presence of developmental assets. It appears that although the majority of all races/ethnicities of SWVAR 6th grade youth indicated positive responses there is an opportunity to capture a larger body of youth by addressing race/ethnicity specific areas just as in gender.

The results of the analysis of the survey items indicated that there are statistically significant differences in the reported external ecology of SWVAR 6th grade youth by race/ethnicity and does not occur merely by chance (Table 4).

Discussion

As identified in the literature review, existing literature indicated that with regard to youth risk behavior and presence of assets/protective factors there are differences in the external ecologies by both gender and race/ethnicity. The results of this research are in agreement with the literature. Differences in the external ecologies of SWVAR 6th grade

youth exist by both gender and race/ethnicity. To more clearly understand the areas in which these differences exist, elaboration in relation to the specific Developmental External Asset Building blocks is in order. Table 5 provides an overview of the findings of significance as well as areas of concern for research questions 1, 2, and 3 in relation to the Developmental Assets Framework.

Table 5

Overview to Areas of Statistical Significance and Areas of Concern

			RQ 1 Area of Concern by Total Overall Report	RQ2 Area Statistically Significant by Gender	RQ2 Area of Concern by Gender	RQ3 Area Statistically Significant by Race/Ethnicity	RQ3 Area of Concern by Race/Ethnicity
Support	Caring School Climate	There are lots of chances for students in my school to get involved in sports, clubs, and other school activities outside of class.			*	*	*
		The school lets me and/or my parents know when I have done something well.	*	*	*	*	*
Empowerment	Service to Others	Do you volunteer in your community (help others without getting paid) such as helping out at a hospital, day care center, food pantry, youth program, animal shelter, community service agency, or faith based program?	*		*	*	*
	Safety	Have you ever missed school because you were afraid of being bullied?	*	*	*		*
Boundaries and Expectations	Family Boundaries	How wrong do your parents feel it would be for you to smoke cigarettes?				*	*
		How wrong do your parents feel it would be for you to drink beer, wine, or liquor (for example, vodka, whiskey, or gin) regularly (or at least twice a month)?	*	*	*		*
		My family has clear rules about alcohol use. How wrong do your parents feel it would be for you to smoke marijuana?				*	*
		My family has clear rules about drug use. How wrong do your parents feel it would be for you to smoke marijuana?				*	*
		When I am not at home, one of my parents knows where I am and who I am with.	*	*	*		*
		Would your parents know if you did not come home on time?	*		*		*
		How wrong do your parents feel it would be for you to break the law (steal, property damage, vandalism, picking a fight)?		*			

Each survey item and subsequent building block held an overall positive tone. As noted, the negative responses include responses that indicate either that the youth was “not sure” or a response which indicated being more in favor, or allowance of the risk behavior. The following highlights, five in total, represent an overview where four or more of the five indicators of significance or concern were identified.

The first area is that of Support. As indicated earlier, according to the Search Institute (2006), *support* refers to the “emotional support from family members, friends, and school professionals” (as cited in Edwards et al., 2007, p. 148). Under the heading of “Caring School Climate” there was one survey item which yielded information regarding the presence of support in the SWVAR 6th youth. In the survey item, “The school lets me and/or my parents know when I have done something well,” there was evidence of need for increased communications regarding the youths’ performance when something was done well between school and parents in all levels of analysis. These identified items indicate an opportunity to provide increased emotional supports to our youth.

The second area of investigation was that of empowerment. *Empowerment* is defined by the Search Institute (2006) as the belief that students are “valued members of the community and that they can contribute to others” (as cited in Edwards et al., 2007, p. 148). As indicated in the definition, such an asset provides opportunities for the youth to have an increased sense of value. Again in this area, there are opportunities for intervention within certain segments. For the survey item “Do you volunteer in your community (help others without getting paid) such as helping out at a hospital, day care center, food pantry, youth program, animal shelter, community service agency, or faith based program?”, although no differences were found within gender, engagement in volunteer work was found to have

areas of concern in the total overall number of respondents, as well as by gender and race/ethnicity. Communities should investigate, attempt to provide and encourage volunteer opportunities in which youth may engage.

The second survey item found under empowerment building block pertains to safety. In this item, “Have you ever missed school because you were afraid of being bullied?”, it was found worthy of mentioning as it has double negative impact on the youth. In this area, the youths’ empowerment opportunities are impeded through a lack of sense of safety, as well as his sense of academic engagement opportunities. It is this researcher’s recommendation that any degree of violence or sense of being threatened is an obligatory area to address.

The third and final area of investigation was that of *boundaries and expectations*. This area according to the Search Institute (2006) refers to “students’ need [for] clear, standards for conduct, consistent consequences, and encouragement” (as cited in Edwards et al., 2007, p. 148). There were two areas which were identified as having four or more indicators. In the survey item “How wrong do your parents feel it would be for you to drink beer, wine, or liquor (for example, vodka, whiskey, or gin) regularly (or at least twice a month?”, there was concern and/or significance with regard to gender and race/ethnicity. In the survey item, “When I am not at home, one of my parents knows where I am and who I am with”, there was concern and/or significance with regard to gender, race/ethnicity as well as the overall total population of responses. These areas, as noted above, may require further investigation. It is uncertain if this is an accurate perception or a lack of communication; regardless, it indicates a need for intervention to some degree. Nevertheless, these perceived lack of family boundaries indicate a need for intervention as perception impacts behavior.

CHAPTER 5

Summary, Conclusions, & Recommendations

Summary

The purpose of this study was to investigate: (a) the reported external ecology present in the SWVAR 6th grade youth, (b) whether there are differences in the reported external ecology by gender, and (c) whether there are differences in the reported external ecology by race/ethnicity. By investigating these questions, and framing data using the Developmental Assets Framework, a more complete picture of the pathology of youth risk behavior of SWVAR 6th grade youth who took part in the 2009-1010 YRBS is offered and provides knowledge and insights as to the presence of assets within the youths' community, or ecological environment. It is these asset areas on which more effective programming can be built and enhanced. These interventions subsequently contribute toward the overall healthy development of the youth, provide positive information regarding the assets present within the communities, opportunities for improvement and ultimately contribute toward an even more positive thriving community.

The study utilized a quantitative, non-experimental exploratory analysis which included descriptive and non-parametric statistics to analyze 12 selected YRBS survey items which were identified as important external assets in accordance with the Search Institute's Developmental Assets for Adolescents. Findings of the analysis indicated a generally positive presence of external assets, yet yielded important information regarding statistically significant differences by gender, race/ethnicity, as well as areas of general concern.

The overall tone of SWVAR 6th grade youth responses indicated a positive perception of assets within their ecology. In response to each research question, there were

either statistically significant differences or areas of concern for each of the External Building Block areas- Support, Empowerment, and Boundaries and Expectations. There were five survey items which were identified as having significance or concern in each level of analysis. In the building block area of *Support*, it was identified that schools could enhance their communications with parents by letting them know when the youth has done something well. In the building block area of *Empowerment*, opportunities for youths to volunteer should be developed and encouraged. In addition, efforts toward decreasing bullying as well as victim identification and intervention in schools should be continued. In the building block area of *Boundaries and Expectations*, education regarding the influences of alcohol should be continued and perhaps expanded upon. Lastly, parents should increase efforts to communicate with their youths regarding the youths' whereabouts and company when not at home. Efforts of the community, community planners and healthcare educators should focus on these areas as their consistent report across total population demographics indicates a need.

Conclusions

Utilization of the Search Institute's Developmental Assets Framework to evaluate the external ecology of the SWVAR 6th grade youth as represented in the 2009-2010 YRBS, provided much information regarding the presence of the necessary building blocks for healthy thriving youths and their communities. The overall ecology was found to be quite positive by the majority of responding youths indicating more favorable or positive responses to the survey items. In each building block, however, segments were found by both gender and race/ethnicity which indicated negative responses and/or represented areas of concern.

The data derived from this study presents an overall positive picture of the presence of the necessary assets required for SWVAR 6th grade to evolve into healthy adults. It also offers information which targets specific segments of specific populations, gender, and race/ethnicities, which could benefit from targeted asset intervention. Given, this information, communities can and should feel proud of what has been presented to their youth in general. Health care educators and community members should recognize that the keystones necessary for a thriving community are present, but that there are opportunities for improvement which can be acknowledged by the community. The word *opportunity* is crucial in that it provides for a more positive approach. As the assets are present, this implies possibility. It is through this possibility that hope is derived rather than despair. There are segments of the surveyed populations which are in need of further intervention. These segments were found by both gender as well as race/ethnicity, which are in agreement with existing literature. Both significant differences which were identified by Chi-Square analysis and areas of concern, as indicated by percentage of negative responses, were found within each of the three assessed Developmental Asset External building blocks: Support, Empowerment, and Boundaries and Expectations.

In several instances, as this study is based on perceptions of the youths, there is a need to gain further insights as to the actual parental thoughts. Due to the nature of the survey item, it was difficult to determine if the report of the child, when negative or rather indicating of parents as “more approving” of a negative behavior, was an accurate report of how the parents actually perceived the behavior, or whether their disapproval of such a behavior was not effectively communicated. In either instance, there is a need for some degree of intervention. Interestingly enough, however, was that those behaviors which have over time

received more multi media attention efforts (i.e., smoking cigarettes and smoking marijuana/drug use) indicated much clearer boundaries. In addition, communications as to where and with whom youths are with when not at home raise concern. As the items identified as “more negative” are grouped, it becomes clearer to the researcher as to how youths are allowed, or find opportunities to engage in youth risk behaviors.

In addition, assets identified as providing more “Support” and “Empowerment,” which is more institutional in nature, indicates a need. Such areas include school system and agencies which might provide opportunities for youth to engage on a volunteer capacity. Youths indicated that communication between school and parents regarding the child’s successes and opportunities for the youth to function in volunteer capacity could be improved. Again, in these areas, it becomes clear as to how such missing assets could contribute toward a youths’ sense of value and hence internal assets and subsequent influences on decision making.

Recommendations for Future Research

As noted above, there is a need for further investigation of certain segments of the overall population which could further identify whether the youths perception of their parents’ views is, in fact, an accurate perception or simply miscommunication. In addition, due to the survey items available for analysis, there was no ability to investigate the presence of several External asset areas as identified by the Search Institutes Framework, nor was there the ability to investigate the Developmental Asset External Building Block of “Constructive use of time” which includes the External Asset Areas of “Creative activities”, “Youth programs”, “Religious Community”, and “Time at home.” Although there were survey items which were present on some of the SWVAR surveys which fit components of

these areas, they were not found to be present in all four surveys and therefore were not able to be included in this current study. Investigation, inclusion, and further analysis of these areas would provide a more comprehensive picture the external ecology of the SWVAR 6th grade youth, enhance the design of health intervention efforts and ultimately contribute to the decreased participation of youth in risk behaviors.

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Appendix A: 40 Developmental Assets



40 Developmental Assets[®] for Adolescents (ages 12-18)

Search Institute[®] has identified the following building blocks of healthy development—known as Developmental Assets[®]—that help young people grow up healthy, caring, and responsible.



External Assets	Support	<ol style="list-style-type: none"> 1. Family support—Family life provides high levels of love and support. 2. Positive family communication—Young person and her or his parent(s) communicate positively, and young person is willing to seek advice and counsel from parents. 3. Other adult relationships—Young person receives support from three or more nonparent adults. 4. Caring neighborhood—Young person experiences caring neighbors. 5. Caring school climate—School provides a caring, encouraging environment. 6. Parent involvement in schooling—Parent(s) are actively involved in helping young person succeed in school.
	Empowerment	<ol style="list-style-type: none"> 7. Community values youth—Young person perceives that adults in the community value youth. 8. Youth as resources—Young people are given useful roles in the community. 9. Service to others—Young person serves in the community one hour or more per week. 10. Safety—Young person feels safe at home, school, and in the neighborhood.
	Boundaries & Expectations	<ol style="list-style-type: none"> 11. Family boundaries—Family has clear rules and consequences and monitors the young person's whereabouts. 12. School Boundaries—School provides clear rules and consequences. 13. Neighborhood boundaries—Neighbors take responsibility for monitoring young people's behavior. 14. Adult role models—Parent(s) and other adults model positive, responsible behavior. 15. Positive peer influence—Young person's best friends model responsible behavior. 16. High expectations—Both parent(s) and teachers encourage the young person to do well.
	Constructive Use of Time	<ol style="list-style-type: none"> 17. Creative activities—Young person spends three or more hours per week in lessons or practice in music, theater, or other arts. 18. Youth programs—Young person spends three or more hours per week in sports, clubs, or organizations at school and/or in the community. 19. Religious community—Young person spends one or more hours per week in activities in a religious institution. 20. Time at home—Young person is out with friends "with nothing special to do" two or fewer nights per week.

Internal Assets	Commitment to Learning	<ol style="list-style-type: none"> 21. Achievement Motivation—Young person is motivated to do well in school. 22. School Engagement—Young person is actively engaged in learning. 23. Homework—Young person reports doing at least one hour of homework every school day. 24. Bonding to school—Young person cares about her or his school. 25. Reading for Pleasure—Young person reads for pleasure three or more hours per week.
	Positive Values	<ol style="list-style-type: none"> 26. Caring—Young person places high value on helping other people. 27. Equality and social justice—Young person places high value on promoting equality and reducing hunger and poverty. 28. Integrity—Young person acts on convictions and stands up for her or his beliefs. 29. Honesty—Young person "tells the truth even when it is not easy." 30. Responsibility—Young person accepts and takes personal responsibility. 31. Restraint—Young person believes it is important not to be sexually active or to use alcohol or other drugs.
	Social Competencies	<ol style="list-style-type: none"> 32. Planning and decision making—Young person knows how to plan ahead and make choices. 33. Interpersonal Competence—Young person has empathy, sensitivity, and friendship skills. 34. Cultural Competence—Young person has knowledge of and comfort with people of different cultural/racial/ethnic backgrounds. 35. Resistance skills—Young person can resist negative peer pressure and dangerous situations. 36. Peaceful conflict resolution—Young person seeks to resolve conflict nonviolently.
	Positive Identity	<ol style="list-style-type: none"> 37. Personal power—Young person feels he or she has control over "things that happen to me." 38. Self-esteem—Young person reports having a high self-esteem. 39. Sense of purpose—Young person reports that "my life has a purpose." 40. Positive view of personal future—Young person is optimistic about her or his personal future.

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Appendix B- County 1 YRBS

2009
MIDDLE SCHOOL
6th Grade
Youth Risk
Behavior Survey

This survey is about health behavior. It has been developed so you can tell us what you do that may affect your health. The information you give will be used to develop better health education for young people like yourself.

DO NOT write your name on this survey. The answers you give will be kept private. No one will know what you write. Answer the questions based on what you really do.

Completing the survey is voluntary. Whether or not you answer the questions will not affect your grade in this class. If you are not comfortable answering a question, just leave it blank.

The questions that ask about your background will be used only to describe the types of students completing this survey. This information will not be used to find out your name. No names will ever be reported.

Make sure to read every question. Fill in the ovals completely. When you are finished, follow the instructions of the person giving you the survey.

Thank you very much for your help.

Directions:

- Use a #2 pencil only. Make dark marks.
- Fill in a response like this: (A) (B) (●) (D) (E) (F) (G)
- To change your answer, erase completely.

-
- | | |
|---|--|
| <p>1. How old are you?</p> <p style="margin-left: 20px;">A. 10 years old or younger
B. 11 years old
C. 12 years old
D. 13 years old
E. 14 years old
F. 15 years old
G. 16 years or older</p> <p>2. What is your sex?</p> <p style="margin-left: 20px;">A. Female B. Male</p> | <p>3. In what grade are you?</p> <p style="margin-left: 20px;">A. 6th grade C. 8th grade
B. 7th grade D. Other</p> <p>4. How do you describe yourself? (Select one or more responses.)</p> <p style="margin-left: 20px;">A. American Indian or Alaskan Native
B. Asian
C. Black or African-American
D. Hispanic or Latino
E. Native Hawaiian or Other Pacific Islander</p> |
|---|--|

- D. A non-family member gave them to me.
- E. A family member gave them to me.
- F. I took them from a store or family member.
- G. I got them some other way.

30. During the past 30 days, on how many days did you use **chewing tobacco, snuff, or dip**, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen?
- A. 0 days
 - B. 1 or 2 days
 - C. 3 to 5 days
 - D. 6 to 9 days
 - E. 10 to 19 days
 - F. 20 to 29 days
 - G. All 30 days

The next 9 questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes.

31. Have you ever had a drink of alcohol, other than a few sips?
- A. Yes
 - B. No
32. How much do you think people risk harming themselves (physically or in other ways) if they take one or two drinks of an alcoholic beverage (beer, wine, liquor) nearly every day?
- A. No risk
 - B. Slight risk
 - C. Moderate risk
 - D. Great risk
33. How easy do you think it would be to get alcohol if you wanted some?
- A. Very easy
 - B. Fairly easy
 - C. Difficult
 - D. Very difficult
 - E. Probably impossible
34. How old were you when you had your first drink of alcohol other than a few sips?
- A. I have never had a drink of alcohol other than a few sips.
 - B. 8 years old or younger
 - C. 9 years old
 - D. 10 years old
 - E. 11 years old
 - F. 12 years old
 - G. 13 years old or older

35. How wrong do your parents feel it would be for you to drink beer, wine or liquor (for example, vodka, whiskey or gin) regularly (or at least twice a month)?

- A. Very wrong
- B. Wrong
- C. A little bit wrong
- D. Not at all wrong

36. During the past 30 days, on how many days did you have at least one drink of alcohol?

- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days

37. During the past 30 days, on how many days did you have at least one drink of alcohol **on school property**?

- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days

38. During the past 30 days, how did you get your own alcohol? (**Select only one response.**)

- A. I did not drink during the past 30 days.
- B. I bought alcohol in a store such as a convenience store, supermarket, discount store or gas station.
- C. I gave someone else money to buy alcohol for me.
- D. A non-family member gave it to me.
- E. A family member gave it to me.
- F. I took alcohol from a store or family.
- G. I got alcohol from my parents.
- H. I got alcohol some other way.

39. My family has clear rules about alcohol use.

- A. Strongly agree
- B. Agree
- C. Disagree
- D. Strongly disagree

The next 5 questions ask about marijuana use. Marijuana has many other names including pot or weed.

40. How much do you think people risk harming themselves (physically or in other ways) if they smoke marijuana?

- A. No risk C. Moderate risk
B. Slight risk D. Great risk
41. How wrong do your parents feel it would be for you to smoke marijuana?
A. Very wrong C. A little bit wrong
B. Wrong D. Not at all wrong
42. Have you ever used marijuana?
A. Yes B. No
43. How old were you when you tried marijuana for the first time?
A. I have never tried marijuana.
B. 8 years old or younger
C. 9 years old
D. 10 years old
E. 11 years old
F. 12 years old
G. 13 years old or older
44. During the past 30 days, on how many days did you have at least one puff of marijuana?
A. 0 days E. 10 to 19 days
B. 1 or 2 days F. 20 to 29 days
C. 3 to 5 days G. All 30 days
D. 6 to 9 days

The next 8 questions ask about other drug use.

45. Have you ever used **any** form of cocaine, including powder, crack, or freebase?
A. Yes B. No
46. Have you ever used **steroid pills or shots** without a doctor's prescription?
A. Yes B. No
47. Have you ever used a needle to inject any illegal drug into your body?
A. Yes B. No
48. Have you ever sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high (huffing)?
A. Yes B. No
49. Have you ever taken over-the-counter drugs to get high?

- A. Yes B. No
50. Have you ever taken prescription drugs to get high?
A. Yes B. No
51. Have you ever used **methamphetamines** (also called speed, crystal, crank, or ice)?
A. Yes B. No
52. My family has clear rules about drug use.
A. Strongly agree C. Disagree
B. Agree D. Strongly disagree

The next 2 questions ask about physical activity.

53. On how many of the past 7 days did you exercise or participate in physical activity **during school** for **at least 20 minutes that made you sweat and breathe hard**, such as basketball, soccer, running, swimming laps, fast bicycling, fast dancing, or similar aerobic activities?
A. 0 days E. 4 days
B. 1 day F. 5 days
C. 2 days G. 6 days
D. 3 days H. 7 days
54. On how many of the past 7 days did you exercise or participate in physical activity **outside of school** for **at least 20 minutes that made you sweat and breathe hard**, such as basketball, soccer, running, swimming laps, fast bicycling, fast dancing, or similar aerobic activities?
A. 0 days E. 4 days
B. 1 day F. 5 days
C. 2 days G. 6 days
D. 3 days H. 7 days

The next 6 questions ask about technology.

55. On an average school day, how many hours do you watch TV, play video games or play on the computer?

- A. I do not watch TV, play video games or play on the computer on an average school day.
 - B. Less than one hour per day
 - C. 1 hour per day
 - D. 2 hours per day
 - E. 3 hours per day
 - F. 4 hours per day
 - G. 5 or more hours per day
56. On an average school day, how many hours do you use the computer or cell phone to communicate with others for something other than school (IM, instant messaging, blogging, chatting, texting)?
- A. I do not use the computer or cell phone to communicate with others on an average school day.
 - B. Less than one hour per day
 - C. 1 hour per day
 - D. 2 hours per day
 - E. 3 hours per day
 - F. 4 hours per day
 - G. 5 or more hours per day.
57. Would your parents be nervous if they knew what you did on the internet or via cell phone?
- A. Yes
 - B. No
58. I feel informed about safety in using the Internet.
- A. Yes
 - B. No
 - C. I don't think there is a safety issue in the online environment.
59. I have a web page, a blog, a face book or other social network currently on the web that I use personally.
- A. Yes
 - B. No
60. Have you ever sent any threatening or intimidating communication online or through cell phones?
- A. I do not use either a computer or cell phone.
 - B. I have never sent any threatening or intimidating communication online or through cell phones.
 - C. Fewer than 5 times

D. More than 5 times

The next 5 questions ask about body weight.

61. How do you describe your weight?
- A. Very underweight
 - B. Slightly underweight
 - C. About the right weight
 - D. Slightly overweight
 - E. Very overweight
62. Which of the following are you trying to do about your weight?
- A. **Lose** weight
 - B. **Gain** weight
 - C. **Stay** the same weight
 - D. I am **not trying to do anything** about my weight.
63. During the past 30 days, did you **go without eating for 24 hours or more** (also called fasting) to lose weight or to keep from gaining weight?
- A. Yes
 - B. No
64. During the past 30 days, did you **take any diet pills, powders or liquids** without a doctor's advice to lose weight or to keep from gaining weight? (Do not include meal replacement products such as Slim Fast.)
- A. Yes
 - B. No
65. During the past 30 days, did you **vomit or take laxatives** to lose weight or to keep from gaining weight?
- A. Yes
 - B. No

The next 3 questions ask about food you ate during the past 7 days.

66. On how many nights per week do you and your family usually sit down to a meal together?
- A. 0 nights
 - B. 1 night per week
 - C. 2 nights per week
 - D. 3 nights per week
 - E. 4 nights per week
 - F. 5 or more night per week

67. On average, how many meals per week do you eat take out or eat out at a restaurant? (Do not include school meals.)
- 0 meals
 - 1 to 2 meals
 - 3 to 4 meals
 - 5 to 6 meals
 - 7 or more meals
68. During the past 7 days, how many times did you eat fruit or vegetables? (Do not count juices.)
- I did not eat fruit or vegetables during the past 7 days.
 - 1 to 3 times during the past 7 days
 - 4 to 6 times during the past 7 days
 - 1 time per day
 - 2 times per day
 - 3 times per day
 - 4 times per day
 - 5 or more times per day

The next 7 questions ask about bullying. For these questions consider bullying as physical intimidation, taunting, name-calling, lying about others, and insults or other comments related to race, gender, religion, physical ability or character that occurs repeatedly and over time.

69. Have you ever been bullied?
- Yes
 - No
70. Have you ever been a bystander while someone else was being bullied?
- Yes
 - No
71. Have you ever bullied someone else?
- Yes
 - No
72. Have you ever been bullied through instant messaging, text messaging or online?
- Yes
 - No
73. If you have been bullied, how often has it occurred?
- I have not been bullied.
 - Several times per day
 - Daily
 - Weekly

- Monthly
- A few times per year

74. If you have been bullied, where has it occurred most often?
- I have not been bullied.
 - Hallway
 - Bathroom
 - Cafeteria
 - Classroom
 - School Bus
 - Gymnasium
 - Other school property
 - Places other than school
 - On-line
75. Have you ever missed school because you were afraid of being bullied?
- Yes
 - No

The next 8 questions are about social behaviors.

76. In my family there are clear rules about what I can and cannot do.
- Strongly agree
 - Disagree
 - Agree
 - Strongly disagree
77. When I am not at home, one of my parents knows where I am and who I am with?
- Yes
 - No
78. How wrong do your parents feel it would be for you to break the law (steal, property damage, vandalism, picking a fight)?
- Very wrong
 - A little bit wrong
 - Wrong
 - Not at all wrong
79. There are lots of chances for students in my school to get involved in sports, clubs, and other school activities outside of class.
- Strongly agree
 - Disagree
 - Agree
 - Strongly disagree
 - Not sure

80. The school lets me and/or my parents know when I have done something well.

- A. Strongly agree D. Disagree
B. Agree E. Strongly disagree
C. Not sure

81. There are people in my community who encourage me to do my best.

- A. Strongly agree C. Disagree
B. Agree D. Strongly disagree

82. Do you volunteer in your community (help others without getting paid) such as helping out at a hospital, day care center, food pantry, youth program, animal shelter, community service agency, or faith based program?

- A. No, I do not volunteer.
B. Yes, up to 1 hour per week
C. Yes, 2 hours per week
D. Yes, 3 to 5 hours per week
E. Yes, 6 to 10 hours per week
F. Yes, 11 or more hours per week

83. Would your parents know if you did not come home on time?

- A. Yes B. No

The next 4 questions are about character.

84. How many times do you think you have cheated on a test at school in the past year?

- A. None
B. 1 to 2 times
C. 3 to 5 times
D. 6 to 10 times
E. 10 or more times

85. How many times do you think you have cheated on an assignment at school in the past year?

- A. None
B. 1 to 2 times
C. 3 to 5 times
D. 6 to 10 times
E. 10 or more times

86. In the real world, successful people do what they have to do to win, even if others consider it cheating.

- A. Strongly agree C. Disagree
B. Agree D. Strongly disagree

87. Being a good person is more important than being rich.

- A. Strongly agree C. Disagree
B. Agree D. Strongly disagree

This is the end of the survey.

Thank you very much for your help.

Appendix C- County 2 YRBS

MIDDLE SCHOOL
6th grade
Youth Risk
Behavior Survey

This survey is about health behavior. It has been developed so you can tell us what you do that may affect your health. The information you give will be used to develop better health education for young people like yourself.

DO NOT write your name on this survey. The answers you give will be kept private. No one will know what you write. Answer the questions based on what you really do.

Completing the survey is voluntary. Whether or not you answer the questions will not affect your grade in this class. If you are not comfortable answering a question, just leave it blank.

The questions that ask about your background will be used only to describe the types of students completing this survey. This information will not be used to find out your name. No names will ever be reported.

Make sure to read every question. Fill in the ovals completely. When you are finished, follow the instructions of the person giving you the survey.

Thank you very much for your help.

Directions:

- Use a #2 pencil only. Make dark marks.
- Fill in a response like this:
- To change your answer, erase completely.

- | | |
|---|---|
| <p>1. How old are you?</p> <p>A. 10 years old or younger
B. 11 years old
C. 12 years old
D. 13 years old
E. 14 years old
F. 15 years old
G. 16 years or older</p> <p>2. What is your sex?</p> <p>A. Female B. Male</p> | <p>3. In what grade are you?</p> <p>A. 6th grade C. 8th grade
B. 7th grade D. Other</p> <p>4. How do you describe yourself? (Select one or more responses.)</p> <p>A. American Indian or Alaskan Native
B. Asian
C. Black or African-American
D. Hispanic or Latino
E. Native Hawaiian or Other Pacific Islander
F. White</p> |
|---|---|

5. What is your zip code?
- | | |
|----------|-----------------|
| A. 24012 | F. 24017 |
| B. 24013 | G. 24018 |
| C. 24014 | H. 24019 |
| D. 24015 | I. Other |
| E. 24016 | J. I don't know |

6. During the past 12 months, how would you describe your grades in school?
- | | |
|-----------------------|-----------------------|
| A. Mostly A's and B's | C. Mostly C's and D's |
| B. Mostly B's and C's | D. Mostly D's and F's |

The next 2 questions ask about personal safety.

7. How often do you wear a seat belt when **riding in a car**?
- | | |
|-----------|---------------------|
| A. Never | C. Most of the time |
| B. Rarely | D. Always |
8. Have you ever ridden in a car driven by someone who has been drinking alcohol?
- A. Yes
B. No
C. Not sure

The next 7 questions ask about violence-related behaviors.

9. Have you ever carried **a weapon** such as a gun, knife, or club?
- A. Yes B. No
10. Have you ever been in a physical fight?
- A. Yes B. No
11. Have you ever been in a physical fight in which you were hurt and had to be treated by a doctor or nurse?
- A. Yes B. No
12. During the past 30 days, on how many days did you **not** go to school because you felt you would be unsafe at school or on your way to or from school?
- | | |
|----------------|-------------------|
| A. 0 days | D. 4 or 5 days |
| B. 1 day | E. 6 or more days |
| C. 2 or 3 days | |
13. How often do you feel afraid of getting hurt by someone in your home?
- | | |
|--------------------|-----------|
| A. Never | D. Often |
| B. Once in a while | E. Always |
| C. Sometimes | |

14. Have you ever been physically harmed (that is, where someone caused you to have a scar, black and blue marks, welts, bleeding or a broken bone) by someone in your family or someone living with you?

A. Never	D. 4 to 10 times
B. Once	E. More than 10 times
C. 2 or 3 times	

15. Have you ever seen or heard someone in your home being physically harmed (that is, where someone caused an individual to have a scar, black and blue marks, welts, bleeding or a broken bone)?

A. Never	D. 4 to 10 times
B. Once	E. More than 10 times
C. 2 or 3 times	

The next 5 questions ask about attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide or killing themselves.

16. How often did you feel sad or depressed during the last month?
- | | |
|---------------------|--------------------|
| A. All of the time | D. Once in a while |
| B. Most of the time | E. Not at all |
| C. Some of the time | |

17. During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?
- A. Yes B. No

18. Have you ever **seriously** thought about killing yourself?

A. Yes B. No

19. Have you ever made a **plan** to kill yourself?

A. Yes B. No

20. Have you ever **tried** to kill yourself?

A. Yes B. No

The next 12 questions ask about tobacco use.

21. How much do you think people risk harming themselves (physically or in other ways) if they smoke one or more packs of cigarettes a day?

A. No risk	C. Moderate risk
B. Slight risk	D. Great risk

36. How old were you when you had your first drink of alcohol other than a few sips?
- I have never had a drink of alcohol other than a few sips
 - 8 years old or younger
 - 9 years old
 - 10 years old
 - 11 years old
 - 12 years old
 - 13 years old or older
37. How wrong do your parents feel it would be for you to drink beer, wine or liquor (for example, vodka, whiskey or gin) regularly (or at least twice a month)?
- Very wrong
 - Wrong
 - A little bit wrong
 - Not at all wrong
38. How much has your family talked to you about the dangers of using/drinking alcohol?
- A lot
 - Some
 - Not much
 - Not at all
39. During the past 30 days, on how many days did you have at least one drink of alcohol?
- 0 days
 - 1 or 2 days
 - 3 to 5 days
 - 6 to 9 days
 - 10 to 19 days
 - 20 to 29 days
 - All 30 days
40. My family has clear rules about alcohol use.
- Strongly agree
 - Agree
 - Disagree
 - Strongly disagree

The next 6 questions ask about marijuana use. Marijuana also is called grass or pot.

41. How much do you think people risk harming themselves (physically or in other ways) if they smoke marijuana?
- No risk
 - Slight risk
 - Moderate risk
 - Great risk
42. How wrong do your parents feel it would be for you to smoke marijuana?
- Very wrong
 - Wrong
 - A little bit wrong
 - Not at all wrong
43. How much has your family talked to you about the dangers of smoking marijuana?
- A lot
 - Some
 - Not much
 - Not at all
44. Have you ever used marijuana?
- Yes
 - No

45. How old were you when you tried marijuana for the first time?
- I have never tried marijuana
 - 8 years old or younger
 - 9 years old
 - 10 years old
 - 11 years old
 - 12 years old
 - 13 years old or older
46. During the past 30 days, on how many days did you have at least one puff of marijuana?
- 0 days
 - 1 or 2 days
 - 3 to 5 days
 - 6 to 9 days
 - 10 to 19 days
 - 20 to 29 days
 - All 30 days

The next 9 questions ask about other drug use.

47. Have you ever used **any** form of cocaine?
- Yes
 - No
48. Have you ever used **steroid pills or shots** without a doctor's prescription?
- Yes
 - No
49. Have you ever used a needle to inject any illegal drug into your body?
- Yes
 - No
50. Have you ever sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high (huffing)?
- Yes
 - No
51. Have you ever taken over-the-counter drugs to get high?
- Yes
 - No
52. Have you ever taken prescription drugs to get high?
- Yes
 - No
53. Have you ever used **methamphetamines** (also called speed, crystal, crank, or ice)?
- Yes
 - No
54. During your life, how many times have you used **ecstasy** (also called MDMA)?
- 0 times
 - 1 or 2 times
 - 3 to 9 times
 - 10 to 19 times
 - 20 to 39 times
 - 40 or more times
55. My family has clear rules about drug use.
- Strongly agree
 - Agree
 - Disagree
 - Strongly disagree

The next 7 questions ask about bullying. For these questions consider bullying as physical intimidation, taunting, name-calling, lying about others, and insults or other comments related to race, gender, religion, physical ability or character that occurs repeatedly and over time.

56. Have you ever been bullied?
A. Yes B. No
57. Have you ever been a bystander while someone else was being bullied?
A. Yes B. No
58. Have you ever bullied someone else?
A. Yes B. No
59. Have you ever been bullied through instant messaging, text messaging or online?
A. Yes B. No
60. If you have been bullied, how often has it occurred?
A. I have not been bullied
B. Several times per day
C. Daily
D. Weekly
E. Monthly
F. A few times per year
61. If you have been bullied, where has it occurred most often?
A. I have not been bullied
B. Hallway
C. Bathroom
D. Cafeteria
E. Classroom
F. School Bus
G. Gymnasium
H. Places other than school
62. Have you ever missed school because you were afraid of being bullied?
A. Yes B. No

The next 9 questions are about social behaviors.

63. When I am not at home, one of my parents knows where I am and who I am with?
A. Yes B. No

64. In my family there are clear rules about what I can and cannot do.
A. Strongly agree C. Disagree
B. Agree D. Strongly disagree
65. How wrong do your parents feel it would be for you to break the law (steal, property damage, vandalism, picking a fight)?
A. Very wrong C. A little bit wrong
B. Wrong D. Not at all wrong
66. During the last 4 weeks, how many days of school have you missed because you "skipped" or "ditched"?
A. 0 days E. 4 or 5 days
B. 1 day F. 6 to 10 days
C. 2 days G. 11 or more days
D. 3 days
67. There are lots of chances for students in my school to get involved in sports, clubs, and other school activities outside of class.
A. Strongly agree D. Disagree
B. Agree E. Strongly disagree
C. Not sure
68. The school lets me and/or my parents know when I have done something well.
A. Strongly agree D. Disagree
B. Agree E. Strongly disagree
C. Not sure
69. There are people in my community who encourage me to do my best.
A. Strongly agree C. Disagree
B. Agree D. Strongly disagree
70. Do you volunteer in your community (help others without getting paid) such as helping out at a hospital, day care center, food pantry, youth program, animal shelter, community service agency, or faith based program?
A. No, I do not volunteer
B. Yes, up to 1 hour per week
C. Yes, 2 hours per week
D. Yes, 3 to 5 hours per week
E. Yes, 6 to 10 hours per week
F. Yes, 11 or more hours per week
71. Would your parents know if you did not come home on time?
A. Yes B. No

Thank you for completing this survey.

Appendix D: County 3 YRBS

MIDDLE SCHOOL
6th grade
Youth Risk Behavior Survey

This survey is about health behavior. It has been developed so you can tell us what you do that may affect your health. The information you give will be used to develop better health education for young people like yourself.

DO NOT write your name on this survey. The answers you give will be kept private. No one will know what you write. Answer the questions based on what you really do.

Completing the survey is voluntary. Whether or not you answer the questions will not affect your grade in this class. If you are not comfortable answering a question, just leave it blank.

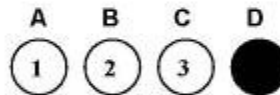
The questions that ask about your background will be used only to describe the types of students completing this survey. The information will not be used to find out your name. No names will ever be reported.

Make sure to read every question. Fill in the ovals completely. When you are finished, follow the instructions of the person giving you the survey.

Thank you very much for your help.

Directions:

- Use a #2 pencil only.
- Make dark marks.
- Fill in a response like this:
- To change your answer, erase completely.



1. How old are you?
 - A. 10 years old or younger
 - B. 11 years old
 - C. 12 years old
 - D. 13 years old
 - E. 14 years old
 - F. 15 years old
 - G. 16 years or older
2. What is your sex?
 - A. Female
 - B. Male
3. In what grade are you?
 - A. 6th grade
 - B. 7th grade
 - C. 8th grade
 - D. Other
4. How do you describe yourself? (Select one)
 - A. American Indian or Alaskan Native
 - B. Asian
 - C. Black or African American
 - D. Hispanic or Latino
 - E. Native Hawaiian or Other Pacific Islander
 - F. White
 - G. Multi-racial (two or more)
5. During the past 12 months, how would you describe your grades in school?
 - A. Mostly A's and B's
 - B. Mostly B's and C's
 - C. Mostly C's and D's
 - D. Mostly D's and F's

The next 3 questions ask about personal safety.

6. How often do you wear a seat belt when riding in a car?
 - A. Never
 - B. Rarely
 - C. Most of the time
 - D. Always
7. When you ride a bike, rollerblade or ride a skateboard, how often do you wear a helmet?
 - A. I do not bike, rollerblade or ride a skateboard
 - B. I never wear a helmet
 - C. I rarely wear a helmet
 - D. Most of the time I wear a helmet
 - E. I always wear a helmet
8. Have you ever ridden in a car driven by someone who has been drinking alcohol?
 - A. Yes
 - B. No
 - C. Not sure

The next 8 questions are about violence related questions.

9. Have you ever carried a weapon such as a gun, knife, or club?
 - A. Yes
 - B. No

10. Are you aware of any gang activities in your school?
 - A. Yes
 - B. No
11. Have you ever been approached to join in gang activities?
 - A. Yes
 - B. No
12. Have you ever been in a physical fight?
 - A. Yes
 - B. No
13. Have you ever been in a physical fight in which you were hurt and had to be treated by a doctor or nurse?
 - A. Yes
 - B. No
14. How often do you feel afraid of getting hurt by someone in your home?
 - A. Never
 - B. Rarely
 - C. Most of the time
 - D. Always
15. Have you ever been physically harmed (that caused you to have a scar, black and blue marks, welts, bleeding or a broken bone) by someone in your family or someone living with you?
 - A. Never
 - B. Once
 - C. 2 or 3 times
 - D. 4 to 10 times
 - E. More than 10 times
16. Have you ever seen or heard someone in your home being physically harmed (that caused a scar, black and blue marks, welts, bleeding or a broken bone)?
 - A. Never
 - B. Once
 - C. 2 or 3 times
 - D. 4 to 10 times
 - E. More than 10 times

The next 7 questions ask about sad feelings, self-injury, and attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide or killing themselves.

17. Have you ever seriously thought about killing yourself?
 - A. Yes
 - B. No
18. Have you ever made a plan to kill yourself?
 - A. Yes
 - B. No
19. Have you ever tried to kill yourself?
 - A. Yes
 - B. No
20. During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?
 - A. Yes
 - B. No

21. During your life, how many times have you intentionally cut, pinched, bruised or burned yourself?
 A. 0 times C. 3 to 9 times
 B. 1 or 2 times D. 10 or more times
22. During the past 30 days, how many times have you intentionally cut, pinched, bruised or burned yourself?
 A. 0 times C. 3 to 9 times
 B. 1 or 2 times D. 10 or more times
23. How many people do you know who have intentionally cut, pinched, bruised, or burned themselves?
 A. 0 people C. 3 or 4 people
 B. 1 or 2 people D. 5 or more people

The next 9 questions ask about tobacco use.

24. Have you ever tried cigarette smoking, even one or two puffs?
 A. Yes B. No
25. How much do you think people risk harming themselves (physically or in other ways) if they smoke one or more packs of cigarettes a day?
 A. Great risk C. Slight risk
 B. Moderate risk D. No risk
26. How old were you when you smoked a whole cigarette for the first time?
 A. I have never smoked a whole cigarette.
 B. 8 years old or younger
 C. 9 years old
 D. 10 years old
 E. 11 years old
 F. 12 years old
 G. 13 years or older
27. During the past 30 days, on how many days did you smoke cigarettes?
 A. 0 days E. 10 to 19 days
 B. 1 or 2 days F. 20 to 29 days
 C. 3 to 5 days G. All 30 days
 D. 6 to 9 days
28. During the past 30 days, on the days you smoked, how many cigarettes did you smoke?
 A. I did not smoke cigarettes during the past 30 days.
 B. Less than 1 cigarette per day
 C. 1 cigarette per day
 D. 2 to 5 cigarettes per day
 E. 6 to 10 cigarettes per day
 F. 11 to 20 cigarettes per day
 G. More than 20 cigarettes per day

29. How easy do you think it would be for you to get tobacco products if you wanted some?
 A. Very easy D. Very hard
 B. Fairly easy E. Probably impossible
 C. Hard
30. How much has your family talked to you about the dangers of smoking cigarettes?
 A. A lot C. Not much
 B. Some D. Not at all
31. How wrong do your parents feel it would be for you to smoke cigarettes?
 A. Very wrong C. A little bit wrong
 B. Wrong D. Not at all wrong
32. During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen?
 A. 0 days E. 10 to 19 days
 B. 1 or 2 days F. 20 to 29 days
 C. 3 to 5 days G. All 30 days
 D. 6 to 9 days

The next 10 questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes.

33. Have you ever had a drink of alcohol, other than a few sips?
 A. Yes B. No
34. How much do you think people risk harming themselves (physically or in other ways) if they take one or two drinks of an alcoholic beverage (can of beer, glass of wine, liquor) nearly every day?
 A. Great risk C. Slight risk
 B. Moderate risk D. No risk
35. How old were you when you had your first drink of alcohol other than a few sips?
 A. I have never had a drink of alcohol other than a few sips.
 B. 8 years old or younger
 C. 9 years old
 D. 10 years old
 E. 11 years old
 F. 12 years old
 G. 13 years old or older
36. How easy do you think it would be to get alcohol if you wanted some?
 A. Very easy D. Very hard
 B. Fairly easy E. Probably impossible
 C. Hard

37. How wrong do your parents feel it would be for you to drink beer, wine or liquor (for example, vodka, whiskey or gin) regularly (or at least twice a month)?
- A. Very wrong C. A little bit wrong
B. Wrong D. Not at all wrong
38. How much has your family talked to you about the dangers of using/drinking alcohol?
- A. A lot C. Not much
B. Some D. Not at all
39. During the past 30 days, how did you usually get your own alcohol? (**Select only one response.**)
- A. I did not drink alcohol during the past 30 days.
B. I bought alcohol in a store such as a convenience store, supermarket, discount store, or gas station.
C. I gave someone else money to buy alcohol for me.
D. A non-family member gave it to me.
E. A family member gave it to me.
F. I took alcohol from a store or from my home.
G. I got alcohol some other way.
40. During the past 30 days, on how many days did you have at least one drink of alcohol?
- A. 0 days E. 10 to 19 days
B. 1 or 2 days F. 20 to 29 days
C. 3 to 5 days G. All 30 days
D. 6 to 9 days
41. During the past 30 days, on how many days did you have at least one drink of alcohol on school property?
- A. 0 days E. 10 to 19 days
B. 1 or 2 days F. 20 to 29 days
C. 3 to 5 days G. All 30 days
D. 6 to 9 days
42. My family has clear rules about alcohol use.
- A. Yes B. No

The next 7 questions ask about marijuana use. Marijuana also is called grass or pot.

43. Have you ever used marijuana?
- A. Yes B. No
44. How much do you think people risk harming themselves (physically or in other ways) if they smoke marijuana?
- A. Great risk C. Slight risk
B. Moderate risk D. No risk
45. How much has your family talked to you about the dangers of smoking marijuana?
- A. A lot C. Not much
B. Some D. Not at all

46. How old were you when you tried marijuana for the first time?
- A. I have never tried marijuana.
B. 8 years old or younger
C. 9 years old
D. 10 years old
E. 11 years old
F. 12 years old
G. 13 years or older
47. How wrong do your parents feel it would be for you to smoke marijuana?
- A. Very wrong C. A little bit wrong
B. Wrong D. Not at all wrong
48. During the past 30 days, how did you usually get your own marijuana? (**Select only one response.**)
- A. I did not smoke marijuana during the past 30 days.
B. I bought marijuana from a friend.
C. I gave someone else money to buy marijuana for me.
D. A non-family member gave me marijuana.
E. A family member gave marijuana to me.
F. I took marijuana from a friend or family member.
G. I got marijuana some other way.
49. During the past 30 days, on how many days did you have at least one puff of marijuana?
- A. 0 days E. 10 to 19 days
B. 1 or 2 days F. 20 to 29 days
C. 3 to 5 days G. All 30 days
D. 6 to 9 days

The next 9 questions ask about other drug use.

50. Have you ever sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high (huffing)?
- A. Yes B. No
51. Have you ever used any form of cocaine?
- A. Yes B. No
52. Have you ever used steroids without a doctor's prescription?
- A. Yes B. No
53. Have you ever used a needle to inject any illegal drug into your body?
- A. Yes B. No
54. Have you ever taken over-the-counter drugs to get high?
- A. Yes B. No
55. Have you ever taken prescription drugs to get high?
- A. Yes B. No

56. Have you ever used methamphetamines (also called speed, crystal, crank, or ice)?
A. Yes B. No
57. Have you ever used ecstasy (also called MDMA)?
A. Yes B. No
58. My family has clear rules about drug use.
A. Yes B. No

The next 4 questions ask about body weight.

59. How would you describe your weight?
A. Very underweight
B. Slightly underweight
C. About the right weight
D. Slightly overweight
E. Very overweight
60. Have you ever gone without eating for 24 hours or more to lose weight or to keep from gaining weight?
A. Yes B. No
61. Have you ever taken any diet pills, powders, or liquids without a doctor's advice to lose weight or to keep from gaining weight?
A. Yes B. No
62. Have you ever vomited or taken laxatives to lose weight or to keep from gaining weight?
A. Yes B. No

The next 3 questions ask about physical activity.

63. During the past 12 months, on how many sports teams did you play? (Include any teams run by your school or community groups.)
A. 0 teams C. 2 teams
B. 1 team D. 3 or more teams
64. On how many of the past 7 days did you do exercises to strengthen or tone your muscles, such as push-ups, sit-ups, or weight lifting?
A. 0 days E. 4 days
B. 1 day F. 5 days
C. 2 days G. 6 days
D. 3 days H. 7 days
65. On an average school day, how many hours do you watch TV or play video games?
A. I do not watch TV on an average school day.
B. Less than 1 hour per day
C. 1 hour per day
D. 2 hours per day
E. 3 hours per day
F. 4 hours per day
G. 5 or more hours per day

The next 8 questions ask about technology use.

66. I have a web page, a blog, facebook, my space, or other technology presently on the web that I use personally.
A. Yes B. No
67. On an average school day, how many hours do you use the computer to communicate with others for something other than school (texting, facebook, my space, blogging, chatting)?
A. I do not use the computer to communicate with others on an average school day.
B. Less than 1 hour per day
C. 1 hour per day
D. 2 hours per day
E. 3 hours per day
F. 4 hours per day
G. 5 or more hours per day
68. Have you ever received any threatening or intimidating communication online or through texting?
A. No, I haven't
B. Fewer than 5 times
C. 5 times or more
D. I do not use either a computer or cell phone.
69. Have you ever sent any threatening or intimidating communication online or through texting?
A. No, I haven't
B. Fewer than 5 times
C. 5 times or more
D. I do not use either a computer or cell phone.
70. If another student sent you a threatening email or text, would you tell an adult?
A. Yes B. No
71. Would your parents be nervous if they knew what you did on the internet or texting?
A. Yes B. No
72. Have you ever sent inappropriate pictures or messages using a cell phone or computer?
A. Yes B. No
73. I feel very informed about safety and using the internet.
A. Yes
B. No
C. I don't think there is a safety issue in the online environment.

The next 6 questions ask about bullying. For these questions consider bullying as physical intimidation, taunting, name-calling, lying about others, and insults or other comments related to race, gender, religion, physical ability or character that occurs repeatedly and over time.

74. Have you ever been bullied?
A. Yes B. No
75. If you have been bullied, how often has it occurred?
A. I have not been bullied
B. Several times per day
C. Daily
D. Weekly
E. Monthly
F. A few times per year
76. Have you ever been a bystander while someone else was being bullied?
A. Yes B. No
77. Have you ever bullied someone else?
A. Yes B. No
78. If another student was bullying you, would you tell a teacher or staff member at school?
A. Yes B. No
79. Have you ever missed school because you were afraid of being bullied?
A. Yes B. No

The next 7 questions are about social behaviors.

80. How wrong do your parents feel it would be for you to break the law (steal, property damage, vandalism, picking a fight)?
A. Very wrong C. A little bit wrong
B. Wrong D. Not at all wrong
81. There are many chances for students in my school to get involved in sports, clubs, and other school activities outside of class.
A. Yes B. No
82. The school lets me and/or my parents know when I have done something well.
A. Yes B. No
83. I have one or more adults in my life who encourage and listen to me.
A. Yes B. No
84. Do you volunteer in your community (help others without getting paid) such as helping out at a

hospital, day care center, food pantry, youth program, community service agency, or faith based program?

- A. Yes B. No

85. When I am not at home, one of my parents knows where I am and whom I am with.

- A. Yes B. No

86. Would your parents know if you did not come home on time?

- A. Yes B. No

**This is the end of the survey.
Thank you very much for your help.**

Appendix E: City 4 YRBS

MIDDLE SCHOOL
6th grade
Youth Risk
Behavior Survey

This survey is about health behavior. It has been developed so you can tell us what you do that may affect your health. The information you give will be used to develop better health education for young people like yourself.

DO NOT write your name on this survey. The answers you give will be kept private. No one will know what you write. Answer the questions based on what you really do.

Completing the survey is voluntary. Whether or not you answer the questions will not affect your grade in this class. If you are not comfortable answering a question, just leave it blank.

The questions that ask about your background will be used only to describe the types of students completing this survey. This information will not be used to find out your name. No names will ever be reported.

Make sure to read every question. Fill in the ovals completely. When you are finished, follow the instructions of the person giving you the survey.

Thank you very much for your help.

Directions:

- Use a #2 pencil only. Make dark marks.
- Fill in a response like this:
- To change your answer, erase completely.

-
- | | | | | | | | | | | | | | | | | | | | |
|--|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|---------------------|-----------|-----------|
| <p>1. How old are you?</p> <p>A. 10 years old or younger
B. 11 years old
C. 12 years old
D. 13 years old
E. 14 years old
F. 15 years old
G. 16 years or older</p> <p>2. What is your sex?</p> <p>A. Female B. Male</p> <p>3. In what grade are you?</p> <p>A. 6th grade C. 8th grade
B. 7th grade D. Other</p> <p>4. How do you describe yourself? (Select one or more responses.)</p> <p>A. American Indian or Alaskan Native
B. Asian
C. Black or African-American
D. Hispanic or Latino
E. Native Hawaiian or Other Pacific Islander</p> | <p>F. White</p> <p>5. What is your zip code?</p> <table border="0" style="width: 100%;"> <tr> <td>A. 24012</td> <td>F. 24017</td> </tr> <tr> <td>B. 24013</td> <td>G. 24018</td> </tr> <tr> <td>C. 24014</td> <td>H. 24019</td> </tr> <tr> <td>D. 24015</td> <td>I. Other</td> </tr> <tr> <td>E. 24016</td> <td>J. don't know</td> </tr> </table> <p>6. During the past 12 months, how would you describe your grades in school?</p> <table border="0" style="width: 100%;"> <tr> <td>A. Mostly A's and B's</td> <td>C. Mostly C's and D's</td> </tr> <tr> <td>B. Mostly B's and C's</td> <td>D. Mostly D's and F's</td> </tr> </table> <p>The next 2 questions ask about personal safety.</p> <p>7. How often do you wear a seat belt when riding in a car?</p> <table border="0" style="width: 100%;"> <tr> <td>A. Never</td> <td>C. Most of the time</td> </tr> <tr> <td>B. Rarely</td> <td>D. Always</td> </tr> </table> <p>8. Have you ever ridden in a car driven by someone who has been drinking alcohol?</p> <p>A. Yes
B. No</p> | A. 24012 | F. 24017 | B. 24013 | G. 24018 | C. 24014 | H. 24019 | D. 24015 | I. Other | E. 24016 | J. don't know | A. Mostly A's and B's | C. Mostly C's and D's | B. Mostly B's and C's | D. Mostly D's and F's | A. Never | C. Most of the time | B. Rarely | D. Always |
| A. 24012 | F. 24017 | | | | | | | | | | | | | | | | | | |
| B. 24013 | G. 24018 | | | | | | | | | | | | | | | | | | |
| C. 24014 | H. 24019 | | | | | | | | | | | | | | | | | | |
| D. 24015 | I. Other | | | | | | | | | | | | | | | | | | |
| E. 24016 | J. don't know | | | | | | | | | | | | | | | | | | |
| A. Mostly A's and B's | C. Mostly C's and D's | | | | | | | | | | | | | | | | | | |
| B. Mostly B's and C's | D. Mostly D's and F's | | | | | | | | | | | | | | | | | | |
| A. Never | C. Most of the time | | | | | | | | | | | | | | | | | | |
| B. Rarely | D. Always | | | | | | | | | | | | | | | | | | |

C. Not sure

The next 7 questions ask about violence-related behaviors.

9. Have you ever carried a **weapon** such as a gun, knife, or club?
- A. Yes B. No
10. Have you ever been in a physical fight?
- A. Yes B. No
11. Have you ever been in a physical fight in which you were hurt and had to be treated by a doctor or nurse?
- A. Yes B. No
12. During the past 30 days, on how many days did you **not** go to school because you felt you would be unsafe at school or on your way to or from school?
- A. 0 days D. 4 or 5 days
B. 1 day E. 6 or more days
C. 2 or 3 days
13. How often do you feel afraid of getting hurt by someone in your home?
- A. Never D. Often
B. Once in a while E. Always
C. Sometimes
14. Have you ever been physically harmed (that is, where someone caused you to have a scar, black and blue marks, welts, bleeding or a broken bone) by someone in your family or someone living with you?
- A. Never D. 4 to 10 times
B. Once E. More than 10 times
C. 2 or 3 times
15. Have you ever seen or heard someone in your home being physically harmed (that is, where someone caused an individual to have a scar, black and blue marks, welts, bleeding or a broken bone)?
- A. Never D. 4 to 10 times
B. Once E. More than 10 times
C. 2 or 3 times

The next 5 questions ask about attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide or killing themselves.

16. How often did you feel sad or depressed during the last month?
- A. All of the time D. Once in a while
B. Most of the time E. Not at all
C. Some of the time
17. During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?
- A. Yes B. No
18. Have you ever **seriously** thought about killing yourself?
- A. Yes B. No
19. Have you ever made a **plan** to kill yourself?

A. Yes B. No

20. Have you ever **tried** to kill yourself?
- A. Yes B. No

The next 12 questions ask about tobacco use.

21. How much do you think people risk harming themselves (physically or in other ways) if they smoke one or more packs of cigarettes a day?
- A. No risk C. Moderate risk
B. Slight risk D. Great risk
22. How easy do you think it would be for you to get tobacco products if you wanted some?
- A. Very easy D. Very hard
B. Fairly easy E. Probably impossible
C. Hard
23. How much has your family talked to you about the dangers of smoking cigarettes?
- A. A lot C. Not much
B. Some D. Not at all
24. How wrong do your parents feel it would be for you to smoke cigarettes?
- A. Very wrong C. A little bit wrong
B. Wrong D. Not at all wrong
25. Have you ever tried cigarette smoking, even one or two puffs?
- A. Yes B. No
26. How old were you when you smoked a whole cigarette for the first time?
- A. I have never smoked a whole cigarette
B. 8 years old or younger
C. 9 years old
D. 10 years old
E. 11 years old
F. 12 years old
G. 13 years old or older
27. During the past 30 days, on how many days did you smoke cigarettes?
- A. 0 days E. 10 to 19 days
B. 1 or 2 days F. 20 to 29 days
C. 3 to 5 days G. All 30 days
D. 6 to 9 days
28. During the past 30 days, on the days you smoked, how many cigarettes did you smoke **per day**?
- A. I did not smoke cigarettes during the past 30 days
B. Less than 1 cigarette per day
C. 1 cigarette per day
D. 2 to 5 cigarettes per day
E. 6 to 10 cigarettes per day
F. 11 to 20 cigarettes per day
G. More than 20 cigarettes per day
29. When you bought or tried to buy cigarettes in a store in the past 30 days, were you asked to show proof of age?
- A. I did not try to buy cigarettes in a store during the past 30 days
B. Yes, I was asked to show proof of age
C. No, I was **not** asked to show proof of age

30. During the past 30 days, how did you **usually** get your own cigarettes? (**Select only one response.**)
- I did not smoke cigarettes during the past 30 days
 - I bought them in a store such as a convenience store, supermarket, discount store, or gas station
 - I gave someone else money to buy them for me
 - I borrowed (or bummed) them from someone else
 - A person 18 years or older gave them to me
 - I took them from a store or family member
 - I got them some other way
31. During the past 30 days, on how many days did you use **chewing tobacco, snuff, or dip**, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen?
- 0 days
 - 1 or 2 days
 - 3 to 5 days
 - 6 to 9 days
 - 10 to 19 days
 - 20 to 29 days
 - All 30 days
32. During the past 30 days, on how many days did you smoke **cigars, cigarillos, or little cigars**?
- 0 days
 - 1 or 2 days
 - 3 to 5 days
 - 6 to 9 days
 - 10 to 19 days
 - 20 to 29 days
 - All 30 days

The next 8 questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes.

33. Have you ever had a drink of alcohol, other than a few sips?
- Yes
 - No
34. How much do you think people risk harming themselves (physically or in other ways) if they take one or two drinks of an alcoholic beverage (beer, wine, liquor) nearly every day?
- No risk
 - Slight risk
 - Moderate risk
 - Great risk
35. How easy do you think it would be to get alcohol if you wanted some?
- Very easy
 - Fairly easy
 - Hard
 - Very hard
 - Probably impossible
36. How old were you when you had your first drink of alcohol other than a few sips?
- I have never had a drink of alcohol other than a few sips
 - 8 years old or younger
 - 9 years old
 - 10 years old
 - 11 years old
 - 12 years old
 - 13 years old or older
37. How wrong do your parents feel it would be for you to drink beer, wine or liquor (for example, vodka, whiskey or gin) regularly (or at least twice a month)?
- Very wrong
 - Wrong
 - A little bit wrong
 - Not at all wrong
38. How much has your family talked to you about the dangers of using/drinking alcohol?
- A lot
 - Some
 - Not much
 - Not at all

- Some
 - Not at all
39. During the past 30 days, on how many days did you have at least one drink of alcohol?
- 0 days
 - 1 or 2 days
 - 3 to 5 days
 - 6 to 9 days
 - 10 to 19 days
 - 20 to 29 days
 - All 30 days
40. My family has clear rules about alcohol use.
- Strongly agree
 - Agree
 - Disagree
 - Strongly disagree

The next 6 questions ask about marijuana use. Marijuana also is called grass or pot.

41. How much do you think people risk harming themselves (physically or in other ways) if they smoke marijuana?
- No risk
 - Slight risk
 - Moderate risk
 - Great risk
42. How wrong do your parents feel it would be for you to smoke marijuana?
- Very wrong
 - Wrong
 - A little bit wrong
 - Not at all wrong
43. How much has your family talked to you about the dangers of smoking marijuana?
- A lot
 - Some
 - Not much
 - Not at all
44. Have you ever used marijuana?
- Yes
 - No
45. How old were you when you tried marijuana for the first time?
- I have never tried marijuana
 - 8 years old or younger
 - 9 years old
 - 10 years old
 - 11 years old
 - 12 years old
 - 13 years old or older
46. During the past 30 days, on how many days did you have at least one puff of marijuana?
- 0 days
 - 1 or 2 days
 - 3 to 5 days
 - 6 to 9 days
 - 10 to 19 days
 - 20 to 29 days
 - All 30 days

The next 9 questions ask about other drug use.

47. Have you ever used **any** form of cocaine?
- Yes
 - No
48. Have you ever used **steroid pills or shots** without a doctor's prescription?
- Yes
 - No
49. Have you ever used a needle to inject any illegal drug into your body?
- Yes
 - No
50. Have you ever sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high (huffing)?

A. Yes B. No
51. Have you ever taken over-the-counter drugs to get high?

A. Yes B. No

52. Have you ever taken prescription drugs to get high?

A. Yes B. No

53. Have you ever used **methamphetamines** (also called speed, crystal, crank, or ice)?

A. Yes B. No

54. During your life, how many times have you used **ecstasy** (also called MDMA)?

A. 0 times D. 10 to 19 times
B. 1 or 2 times E. 20 to 39 times
C. 3 to 9 times F. 40 or more times

55. My family has clear rules about drug use.

A. Strongly agree C. Disagree
B. Agree D. Strongly disagree

The next 7 questions ask about bullying. For these questions consider bullying as physical intimidation, taunting, name-calling, lying about others, and insults or other comments related to race, gender, religion, physical ability or character that occurs repeatedly and over time.

56. Have you ever been bullied?

A. Yes B. No

57. Have you ever been a bystander while someone else was being bullied?

A. Yes B. No

58. Have you ever bullied someone else?

A. Yes B. No

59. Have you ever been bullied through instant messaging, text messaging or online?

A. Yes B. No

60. If you have been bullied, how often has it occurred?

A. I have not been bullied
B. Several times per day
C. Daily
D. Weekly
E. Monthly
F. A few times per year

61. If you have been bullied, where has it occurred most often?

A. I have not been bullied
B. Hallway
C. Bathroom
D. Cafeteria
E. Classroom
F. School Bus
G. Gymnasium
H. Places other than school

62. Have you ever missed school because you were afraid of being bullied?

A. Yes B. No

The next 9 questions are about social behaviors.

63. When I am not at home, one of my parents knows where I am and who I am with?

A. Yes B. No

64. In my family there are clear rules about what I can and cannot do.

A. Strongly agree C. Disagree
B. Agree D. Strongly disagree

65. How wrong do your parents feel it would be for you to break the law (steal, property damage, vandalism, picking a fight)?

A. Very wrong C. A little bit wrong
B. Wrong D. Not at all wrong

66. During the last 4 weeks, how many days of school have you missed because you "skipped" or "ditched"?

A. 0 days E. 4 or 5 days
B. 1 day F. 6 to 10 days
C. 2 days G. 11 or more days
D. 3 days

67. There are lots of chances for students in my school to get involved in sports, clubs, and other school activities outside of class.

A. Strongly agree D. Disagree
B. Agree E. Strongly disagree
C. Not sure

68. The school lets me and/or my parents know when I have done something well.

A. Strongly agree D. Disagree
B. Agree E. Strongly disagree
C. Not sure

69. There are people in my community who encourage me to do my best.

A. Strongly agree C. Disagree
B. Agree D. Strongly disagree

70. Do you volunteer in your community (help others without getting paid) such as helping out at a hospital, day care center, food pantry, youth program, animal shelter, community service agency, or faith based program?

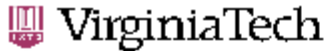
A. No, I do not volunteer
B. Yes, up to 1 hour per week
C. Yes, 2 hours per week
D. Yes, 3 to 5 hours per week
E. Yes, 6 to 10 hours per week
F. Yes, 11 or more hours per week

71. Would your parents know if you did not come home on time?

A. Yes B. No

Thank you for completing this survey.

Appendix F: IRB Approval Letter



Office of Research Compliance
Institutional Review Board
2000 Kraft Drive, Suite 2000 (0497)
Blacksburg, Virginia 24060
540/231-4606 Fax 540/231-0959
e-mail irb@vt.edu
Website: www.irb.vt.edu

MEMORANDUM

DATE: September 15, 2010

TO: Kerry J. Redican, Viki Neurauter

FROM: Virginia Tech Institutional Review Board (FWA00000572, expires June 13, 2011)

PROTOCOL TITLE: An Assessment for Our Future: An Investigation of the Presence of the External Ecological Assets within Four Counties of Southwest Virginia 6th Grade Youth

IRB NUMBER: 10-533

Effective September 15, 2010, the Virginia Tech IRB Chair, Dr. David M. Moore, approved the amendment request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report promptly to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at <http://www.irb.vt.edu/pages/responsibilities.htm> (please review before the commencement of your research).

PROTOCOL INFORMATION:

Approved as: **Exempt, under 45 CFR 46.101(b) category(ies) 4**

Protocol Approval Date: **6/21/2010**

Protocol Expiration Date: **NA**

Continuing Review Due Date*: **NA**

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals / work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

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